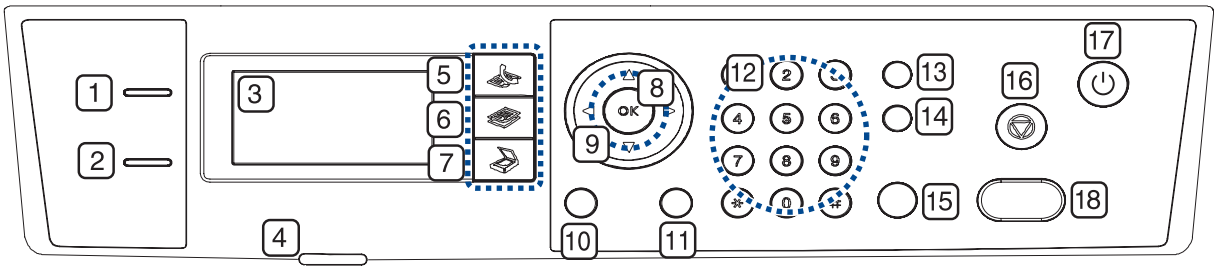
# 4. Alignment & Troubleshooting

## 4.1 Alignment and Adjustments

### 4.1.1 Control panel overview




| | | |
|---|---|---|
| 1 | **ID Copy** | You can copy both sides of the ID Card like a driver's license to a single side of paper. |
| 2 | **Direct USB** | Allows you to directly print files stores on a USB memory device when it is inserted into the USB memory port on your machine. |
| 3 | **Display screen** | Shows the current status and prompts during an operation. |
| 4 | **Status** | Shows the status of your machine. |
| 5 | **Fax** | Activates Fax mode. |
| 6 | **Copy** | Activates Copy mode. |
| 7 | **Scan/Email** | Activates Scan mode. |
| 8 | **OK** | Confirms the selection on the screen. |
| 9 | **Arrow** | Scroll through the options available in the selected menu, and increase or decrease values. |
| 10 | **Menu** | Enters Menu mode and scrolls through the available menus. |
| 11 | **Back** | Sends you back to the upper menu level. |
| 12 | **Numeric keypad** | Dials fax number, and enters the number value for document copies or other options. |
| 13 | **Address Book** | Allows you to store frequently used fax numbers and email addresses or search for stored fax numbers or email addresses. |
| 14 | **Redial/Pause** | In standby mode, redials the last number. Also in edit mode, inserts a pause into a fax number. |
| 15 | **On Hook Dial** | Performs same as you hold a handset under the telephone line is engaged. |
| 16 | **Stop/Clear** | Stops an operation at any time. The pop-up window appears on the screen showing the current job that the user can stop or resume. |
| 17 | **Power Saver** | Sends the machine into power saver mode. You can also turn the power on and off with this button. |
| 18 | **Start** | Starts a job. |

## 4.1.2 Understanding The Status LED

**The color of the Status LED indicates the machine's current status.**

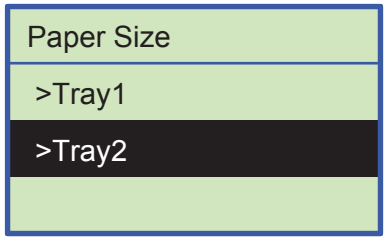
| Status | | Description |
|---|---|---|
| Off | | • The machine is off-line.<br>• The machine is in power saver mode. When data is received, or any button is pressed, it switches to on-line automatically. |
| Green | Blinking | • When the backlight slowly blinks, the machine is receiving data from the computer.<br>• When the backlight blinks rapidly, the machine is printing data. |
| | On | The machine is on-line and can be used. |
| Red | Blinking | • A minor error has occurred and the machine is waiting for the error to be cleared. Check the display message. When the problem is cleared, the machine resumes.<br>• The toner cartridge is near the end of its life.<br>Order a new toner cartridge. You can temporarily improve print quality by redistributing the toner. |
| | On | • The toner cartridge is totally empty. Remove the old toner cartridge and install a new one.<br>• A paper jam has occurred.<br>• The cover is opened. Close the cover.<br>• There is no paper in the tray. Load paper in the tray.<br>• The machine has stopped due to a major error. |

## 4.1.3 Menu Overview

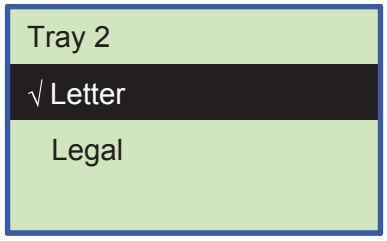
This chapter explains the menu item. If you want to know more information about the menu item, refer to the User Guide.

### 4.1.3.1 Menu navigation and selection item

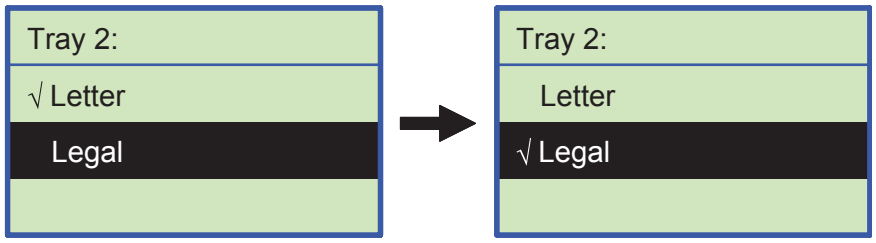
1. Press Menu button. Select the menu you want by using the arrow and OK button.




2. “√” mark indicates current setting value.




3. When you press up/down botton, inversion line will be moved.
When user press OK button, √mark will move to new selected item.




4. Press the OK button to process your selection, save your input or selection.

5. To exit the menu, press the Back button repeatedly, or the Stop button.

## 4.1.3.2 Menu Map

### Fax Menus(Fax Feature)

| Depth 1 | Depth 2 | Depth 3 |
|---|---|---|
| Darkness | Normal * | |
| | Dark | |
| | Light | |
| Resolution | Standard * | |
| | Fine | |
| | Super Fine | |
| | Photo Fax | |
| | Color Fax | |
| Multi Send | Multi Send<br>Fax1:\|<br>Fax2: | Another No.?<br>Yes / No |
| Delay Send | Delay Send<br>Fax1:\| | Another No.?<br>Yes / No |
| Priority Send | Priority Send<br>Fax:\| | Job Name<br>\| |
| Forward | Fax | Send Forward |
| | | Rcv. Forward |
| | E-mail | Send Forward |
| | | Rcv. Forward |
| | Server | Send Forward |
| | | Rcv. Forward |
| Secure Receive | On | Password [????] |
| | Off * | Password [????] |
| | Print | Password [????] |
| Add Page | 10:22Am DelayFax | |
| | ABC | |
| Cancel Job | 10:22Am DelayFax | |
| | ABC | |

## Fax Menus(Fax Setup)

| Depth 1 | Depth 2 | Depth 3 |
|---|---|---|
| Sending | Redial Times | [0-13]times:7 |
| | Redial Term | [1-15]min:3 |
| | Prefix Dial | Prefix Dial No. Fax:\| |
| | ECM Mode | On * |
| | | Off |
| | Send Report | On-Error * |
| | | On |
| | | Off |
| | Image TCR | On * |
| | | Off |
| | Dial Mode | Tone * |
| | | Pulse |
| Receiving | Receive Mode | Fax * |
| | | Tel |
| | | Ans/Fax |
| | | DRPD |
| | Ring to Answer | [1-7]times:1 |
| | Stamp Rcv Name | On |
| | | Off * |
| | Rcv Start Code | [0-9]:9 |
| | Auto Reduction | On * |
| | | Off |
| | Discard Size | [00-30]:20 |
| | Junk Fax Setup | Off * |
| | | On |
| | DRPD Mode | Waiting Ring |
| | Duplex Print | Off * |
| | | Long Edge |
| | | Short Edge |

| Depth 1 | Depth 2 | Depth 3 |
|---|---|---|
| Change Default | Resolution | Standard * |
| | | Fine |
| | | Super Fine |
| | | Photo Fax |
| | | Color Fax |
| | Darkness | Normal* |
| | | Light |
| | | Dark |
| Auto Report | On | |
| | Off | |

## 4.1.3.3 Fax Setup

### Changing the fax setup options

Your machine provides you with various user-selectable options for setting up the fax system. You can change the default settings for your preferences and needs.

To change the fax setup options:
1. Press Fax.
2. Press Menu on the control panel.
3. Press the up/down arrow to highlight Fax Setup and press OK.
4. Press the up/down arrow until the fax setup item you want highlights and press OK.
5. Press the up/down arrow until the option you want highlights and press OK.
6. Press the up/down arrow until the desired status appears or enter the value for the option you have selected, and press OK.
7. If necessary, repeat steps 4 through 6.
8. Press Stop/Clear to return to ready mode.

### Sending

| OPTION | DESCRIPTION |
|---|---|
| **Redial Times** | You can specify the number of redial attempts. If you enter 0, the machine will not redial. |
| **Redial Term** | Your machine can automatically redial a remote fax machine if it was busy. You can set an interval between attempts. |
| **Prefix Dial** | You can set a prefix of up to five digits. This number dials before any automatic dial number is started. It is useful for accessing a PABX exchange. |
| **ECM Mode** | This mode helps with poor line quality and makes sure any faxes you send are sent smoothly to any other ECM-equipped fax machine. Sending a fax using ECM may take more time. |
| **Send Report** | You can set your machine to print a confirmation report showing whether a transmission was successful, how many pages were sent, and more. The available options are On, Off, and On-Error, which prints only when a transmission is not successful. |
| **Image TCR** | This function allows users to know what fax messages have been sent by showing sent messages in the transmission report.<br>The first page of the message is turned into an image file than is printed on the transmission report so the users can see what messages have been sent.<br>However, you can not use this function when sending fax without saving the data in the memory. |
| **Dial Mode** | This setting may not be available depending on your country. If you cannot reach this option, your machine does not support this feature.<br>You can set the dial mode for your machine to either tone dialling or pulse dialling. If you have a public telephone system or a private branch exchnage(PBX) system, you may need to select Pulse. Contact your local telephone company if you are not sure which dial mode to use.<br>If you select Pulse, some phone system features might not be available. It can also take longer to dial a fax or phone number. |

## Receiving

| OPTION | DESCRIPTION |
|---|---|
| **Receive Mode** | You can select the default fax receiving mode. |
| **Ring to Answer** | You can specify the number of times the machine rings before answering an incoming call. |
| **Stamp RCV Name** | This option allows the machine to automatically print the page number, and the date and time of reception at the bottom of each page of a received fax. |
| **Rcv Start Code** | This code allows you to initiate fax reception from an extension phone plugged into the EXT socket on the back of the machine. If you pick up the extension phone and hear fax tones, enter the code. It is preset to *9* at the factory. |
| **Auto Reduction** | When receiving a fax containing pages as long as or longer than the paper loaded in the paper tray, the machine can reduce the size of the original to fit the size of the paper loaded in the machine.<br>Turn on this feature if you want to automatically reduce an incoming page.<br>With this feature set to Off, the machine cannot reduce the original to fit onto one page. The original will be divided and printed in actual size on two or more pages. |
| **Discard Size** | When receiving a fax containing pages as long as or longer than the paper in your machine, you can set the machine to discard a specific length from the end of the received fax. The machine will print the received fax on one or more sheets of paper, minus the data that would have been on the specified discard segment.<br>When the received fax contains pages larger than the paper in your machine, and Auto Reduction has been turned on, the machine will reduce the fax to fit on the existing paper, and nothing will be discarded. |
| **Junk Fax Setup** | This setting may not be available depending on your country. Using this feature, the system will not accept faxes sent from remote stations whose numbers are stored in the memory as junk fax numbers. This feature is useful for blocking any unwanted faxes.<br>When you turn on this feature, you can access the following options to set junk fax numbers.<br>• Add: Allows you to set up to 10 fax numbers.<br>• Delete: Allows you to delete the desired junk fax number. If you select Delete All, Allows you to delete all junk fax numbers. |
| **DRPD Mode** | This mode enables a user to use a single telephone line to answer several different telephone numbers. In this menu, you can set the machine to recognize which ring patterns to answer. |
| **Duplex Print** | Set this duplex feature to save paper. When the machine prints the received fax data, it prints them on both sides of the paper. |

## Change Default

| OPTION | DESCRIPTION |
|---|---|
| **Resolution** | Changing the resolution setting affects the appearance of the received document.<br>• Standard: Originals with normal sized characters.<br>• Fine: Originals containing small characters or thin lines or originals printed using a dot-matrix printer.<br>• Super Fine: Originals containing extremely fine detail. Super Fine mode is enabled only if the machine with which you are communicating also supports the Super Fine resolution.<br><br>• For memory transmission, Super Fine mode is not available. The resolution setting is automatically changed to Fine.<br>• When your machine is set to Super Fine resolution and the fax machine with which you are communicating does not support Super Fine resolution, the machine transmits using the highest resolution mode supported by the other fax machine.<br><br>• Photo Fax: Originals containing shades of gray or photographs.<br>• Color Fax: Originals with colors. Sending a color fax is enabled only if the machine with which you are communicating supports color fax reception and you send the fax manually. In this mode, memory transmission is not available. |
| **Darkness** | You can select the default contrast mode to fax your originals lighter or darker. |

## Auto Report

You can set the machine to print a report with detailed information about the previous 50 communication operations, including time and dates.

## Copy Menus

| Copy Feature | |
|---|---|
| Reduce/Enlarge | Org.(100%) * |
| | Custom |
| | Auto Fit |
| | LGL->LTR(78%) |
| | LGL->A4(83%) |
| | A4->A5(71%) |
| | A4->LTR(94%) |
| | A5->A4(141%) |
| | EXE->LTR(104%) |
| | 25% |
| | 50% |
| | 150% |
| | 200% |
| | 400% |
| Darkness | Normal * |
| | Light |
| | Dark |
| Original Type | Text * |
| | Text/Photo |
| | Photo |
| Layout | Normal * |
| | 2-Up |
| | 4-Up |
| | ID copy |
| | Poster Copy |
| | Clone Copy |

| Copy Setup | | |
|---|---|---|
| Duplex Print | Off * | |
| | 1->2Side Long | |
| | 1->2SideShort | |
| Change Default | # of Copies | [1-99] : 1 |
| | Copy Collation | On |
| | | Off * |
| | Reduce/Enlarge | Org.(100%) * |
| | | Custom |
| | | Auto Fit |
| | | LGL->LTR(78%) |
| | | LGL->A4(83%) |
| | | A4->A5(71%) |
| | | A4->LTR(94%) |
| | | A5->A4(141%) |
| | | EXE->LTR(104%) |
| | | 25% |
| | | 50% |
| | | 150% |
| | | 200% |
| | | 400% |
| | Darkness | Normal * |
| | | Light |
| | | Dark |
| | Original Type | Text * |
| | | Text/Photo |
| | | Photo |

## 4.1.3.4 Copy Setup

### Changing the copy setup options

For copy output, you can set up several options in advance.

1. Press Copy on the control panel.
2. Press Menu on the control panel.
3. Press the up/down arrow to highlight Copy Setup and press OK.
4. Press the up/down arrow until the copy setup item you want highlights and press OK.
5. Press the up/down arrow until the setup option you want highlights and press OK.
6. Press the up/down arrow until the setting you want highlights and press OK.
7. Repeat steps 4 through 6, as needed.
8. Press Stop/Clear to return to ready mode.

### Duplex Print

You can set the machine to print copies on both sides of paper.

### Change Default

| OPTION | DESCRIPTION |
|---|---|
| **#of Copies** | You can enter the number of copies using the number keypad. |
| **Copy Collation** | You can set the machine to sort the copy job. |
| **Reduce/Enlarge** | Reduces or enlarges the size of a copied image. |
| **Darkness** | Adjusts the brightness level to make a copy that is easier to read, when the original contains faint markings and dark images. |
| **Original Type** | Improves the copy quality by selecting the document type for the current copy job. |

## Scan Menus (Scan Feature)

| USB Feature | |
|---|---|
| Scan Size | A4 * |
| | A5 |
| | B5 |
| | Letter |
| | Legal |
| | Executive |
| | Folio |
| | Oficio |
| Original Type | Text * |
| | Text/Photo |
| | Photo |
| Resolution | 100 dpi |
| | 200 dpi |
| | 300 dpi * |
| Scan Color | Color * |
| | Gray |
| | Mono |
| Scan Format | BMP |
| | SINGLE-TIFF |
| | MULTI-TIFF |
| | PDF |
| | JPEG* |

| E-mail Feature | |
|---|---|
| Scan Size | A4 * |
| | A5 |
| | B5 |
| | Letter |
| | Legal |
| | Executive |
| | Folio |
| | Oficio |
| Original Type | Text * |
| | Text/Photo |
| | Photo |
| Resolution | 100 dpi |
| | 200 dpi |
| | 300 dpi * |
| Scan Color | Color |
| | Gray |
| | Mono * |

| FTP Feature | |
|---|---|
| Scan Size | A4 * |
| | A5 |
| | B5 |
| | Letter |
| | Legal |
| | Executive |
| | Folio |
| | Oficio |
| Original Type | Text * |
| | Text/Photo |
| | Photo |
| Resolution | 100 dpi |
| | 200 dpi |
| | 300 dpi * |
| Scan Color | Color * |
| | Gray |
| | Mono |

| SMB Feature | |
|---|---|
| Scan Size | A4 * |
| | A5 |
| | B5 |
| | Letter |
| | Legal |
| | Executive |
| | Folio |
| | Oficio |
| Original Type | Text * |
| | Text/Photo |
| | Photo |
| Resolution | 100 dpi |
| | 200 dpi |
| | 300 dpi * |
| Scan Color | Color * |
| | Gray |
| | Mono |

## Scan Menus (Scan Setup)

| USB Default | |
|---|---|
| Scan Size | A4 * |
| | A5 |
| | B5 |
| | Letter |
| | Legal |
| | Executive |
| | Folio |
| | Oficio |
| Original Type | Text * |
| | Text/Photo |
| | Photo |
| Resolution | 100 dpi |
| | 200 dpi |
| | 300 dpi * |
| Scan Color | Color * |
| | Gray |
| | Mono |
| Scan Format | BMP |
| | SINGLE-TIFF |
| | MULTI-TIFF |
| | PDF |
| | JPEG* |

| E-Mail Default / FTP Default / SMB Default | |
|---|---|
| Scan Size | A4 * |
| | A5 |
| | B5 |
| | Letter |
| | Legal |
| | Executive |
| | Folio |
| | Oficio |
| Original Type | Text * |
| | Text/Photo |
| | Photo |
| Resolution | 100 dpi |
| | 200 dpi |
| | 300 dpi * |
| Scan Color | Color |
| | Gray |
| | Mono * |
| Scan Format | SINGLE-TIFF |
| | MULTI-TIFF |
| | PDF : MULTI-TIFF* |
| | JPEG |

## 4.1.3.5 Scan Setup

### Changing the scan setup options

To avoid having to customize the scan settings for each job, you can set up default scan settings for each scan type.

1. Press Scan/Email.
2. Press Menu on the control panel.
3. Press the up/down arrow to highlight Scan Setup and press OK.
4. Press OK when Change Default highlights .
5. Press the up/down until the scan type you want highlights and press OK.
6. Press the up/down until the scan setting option you want highlights and press OK.
7. Press the up/down arrow until the desired status highlights and press OK.
8. Repeat steps 6 and 7 to set other setting options.
9. When you have finished, press Stop/Clear to return to ready mode.

| OPTION | DESCRIPTION |
|---|---|
| **Scan Size** | Sets the image size. |
| **Original Type** | Sets the original document's type. |
| **Resolution** | Sets the image resolution. |
| **Scan Color** | Sets the color mode. |
| **Scan Format** | Sets the file format in which the image is to be saved. If you select TIFF or PDF, you can select to scan multiple pages. |

## System Setup (Machine Setup)

| | |
|---|---|
| Machine ID | ID:\| |
| Machine Fax No. | Fax:\| |
| Date & Time | 12-31-2004[MDY]<br>12:00 AM |
| Clock Mode | 12 Hours * |
| | 24 Hours |
| Language | English * |
| | FRANCAIS |
| | Espanol |
| | Portugues E. |
| | Portugues B. |
| | Deutsch |
| | Italiano |
| | Nederlands |
| | Русский |
| | Norsk |
| | Polski |
| | Suomi |
| | Magyar |
| | Dansk |
| | Cestina |
| | Svenska |
| | Turkce |
| | 中國語 |
| | 한국어 |
| Default Mode | Copy * |
| | Fax |

| | |
|---|---|
| Power Save | 5 Min |
| | 10 Min |
| | 15 Min |
| | 20 Min |
| | 30 Min * |
| | 45 Min |
| | 60 Min |
| | 120 Min |
| Scan Power Save | 30 Min * |
| | 60 Min |
| | 120 Min |
| Timeout | Off |
| | 15 Sec |
| | 30 Sec * |
| | 60 Sec |
| | 120 Sec |
| | 180 Sec |
| Job Timeout | [0-300]sec:15* |
| Altitude Adj. | Normal * |
| | High 1 |
| Auto Continue | On * |
| | Off |
| Auto Tray Switch | On * |
| | Off |
| Toner Save | On |
| | Off * |
| Import Setting | Address Book |
| | Setup Data |
| Export Setting | Address Book |
| | Setup Data |

## System Setup (Paper Setup)

| Paper Size | |
|---|---|
| Tray 1/ 2 | Letter * (USA...) |
| | Legal |
| | Oficio |
| | Folio |
| | A4 * (UK…) |
| | ISO B5 |
| | JIS B5 |
| | Executive |
| | A5 |
| MP Tray | Letter * (USA...) |
| | Legal |
| | Oficio |
| | Folio |
| | A4 * (UK…) |
| | ISO B5 |
| | JIS B5 |
| | Statement |
| | Executive |
| | Letter>Legal>Oficio>Folio>A4>IsoB5>JisB5>Statement>Executive>A5>A6>Monarch ENV>DL Env>C5 Env>C6 Env>No.10 Env>Post Card>Custom |

| Tray Confirm | |
|---|---|
| Tray 1/2 | On * |
| | Off |

| Paper Type | |
|---|---|
| Tray 1/2 | Plain Paper * |
| | Thick |
| | Thin |
| | Preprinted |
| | Recycled |
| | Archive |
| MP Tray | Plain Paper * |
| | Thick |
| | Thin |
| | Cotton |
| | Colored |
| | Preprinted |
| | Recycled |
| | Transparency |
| | Labels |
| | Card Stock |
| | Bond |
| | Archive |

| Paper Source | |
|---|---|
| Copy Tray | Tray 1 |
| | Tray 2 |
| | MP Tray |
| | Tray1/2 |
| | Auto * |
| Fax Tray | Tray 1 |
| | Tray 2 |
| | Tray1/2 |
| | Auto * |

## System Setup (Sound/ Report/ Maintenance/ Clear Setting)

| Sound/Volume | |
|---|---|
| Key Sound | On |
| | Off * |
| Alarm Sound | On * |
| | Off |
| Speaker | On |
| | Off |
| | Comm. * |
| Ringer | Off |
| | Low |
| | Mid * |
| | High |

| Maintenance | |
|---|---|
| CLR Empty Msg(In case of occuring Toner Low) | Off * |
| | On |
| Ignore Toner | Off * |
| | On |
| Supplies Life | Supplies Info |
| | Total |
| | ADF Scan |
| | Platen Scan |
| | Transfer Belt |
| Toner Low Alert | On * |
| | Off |
| Serial Number | Serial No. |
| Paper Stacking | Off * |
| | On |
| Toner low Notice | 1% |
| | 5% |
| | 10% * |
| | 15% |

| Report | |
|---|---|
| All Reports | Printing? Yes/No |
| Configuration | Printing? Yes/No |
| Phone Book | Printing? Yes/No |
| Address Book | Fax |
| | E-mail |
| Send Report | Printing? Yes/No |
| Sent Report | Fax |
| | E-mail |
| Rcv Report | Printing? Yes/No |
| Fax Rcv Report | Printing? Yes/No |
| Schedule Jobs | Printing? Yes/No |
| User Auth List | Printing? Yes/No |

| Clear Setting | |
|---|---|
| All Settings | |
| Fax Setup | |
| Copy Setup | |
| Scan Setup | |
| System Setup | |
| Network Setup | |
| Phone Book | |
| Address Book | Fax |
| | Email |
| Sent Report | Fax |
| | Email |
| Rcv Report | |
| Fax Rcv Report | |

## 4.1.3.6 Clearing Memory

You can selectively clear information stored in your machine's memory.

1. Press Menu on the control panel.
2. Press the up/down arrow to highlight System Setup and press OK.
3. Press the up/down arrow to highlight Clear Setting and press OK.
4. Press the up/down arrow until the item you want to clear highlights and press OK.
5. Press OK when Yes highlights to confirm clearing.
6. Repeat steps 4 through 5 to clear another item.
7. Press Stop/Clear to return to ready mode.

| OPTION | DESCRIPTION |
|---|---|
| **All settings** | Clears all of the data stored in memory and resets all of your settings to the factory default. |
| **Fax Setup** | Restores all of the fax options to the factory default. |
| **Copy Setup** | Restores all of the copy options to the factory default. |
| **Scan Setup** | Restores all of the scan options to the factory default. |
| **System Setup** | Restores all of the system options to the factory default. |
| **Network Setup** | Restores all of the network options to the factory default. |
| **Address Book** | Clears all of the email address entries stored in memory. |
| **Sent Report** | Clears all records of sent faxes and emails. |
| **Fax Rcv Report** | Clears all records of received faxes. |

## Network Menus

| Depth 1 | Depth 2 | Depth 3 | Depth 4 | Depth 5 |
|---|---|---|---|---|
| TCP/IP | DHCP * | | | |
| | BOOTP | | | |
| | Static | IP Address | 192.0.0.192 | Subnet Mask |
| | | Primary DNS | 0.0.0.0 | |
| | | Secondary DNS | 0.0.0.0 | |
| Ethernet Speed | Auto * | | | |
| | 10M Half | | | |
| | 10M Full | | | |
| | 100M Half | | | |
| | 100M Full | | | |
| Wireless(for only wireless model) | WLAN Setting | Wizard * | Search ListTestSSID List | WLAN Security |
| | | | | Authentication |
| | | | | WPA Key |
| | | | | Error |
| | | Custom | Edit SSID | Operation Mode |
| | WLAN Default | Restore | | |
| | WLAN Signal | Excellent<br>Very Good<br>Good<br>Low<br>Very Low<br>No Signal | | |
| Clear Settings | Clearing? Yes/No | Clearing… | | |
| Network Info. | Printing? Yes/No | Printing... | | |

### 4.1.3.7 Network

You may set up the network with the machine's touch screen. Before doing that, you must have the relevant information concerning the type of network protocols and computer system you use. If you are not sure which setting to use, contact your network administrator to configure this machine to the network.

1. Press Menu on the control panel.
2. Press the up/down arrow to highlight Network and press OK.
3. Press the up/down arrow until the setup option you want highlights and press OK.
4. Press the up/down arrow until the setting you want highlights and press OK.
5. Repeat steps 3 through 4, as needed.
6. Press Stop/Clear to return to ready mode.

| OPTION | DESCRIPTION |
|---|---|
| **TCP/IP** | Select appropriate protocol and configure parameters to use the network environment. |
| **Ethernet Speed** | Configure the network transmission speed. |
| **Wireless**[a] | Configure the wireless network environments. |
| **Clear Settings** | Reverts the network settings to the default values. |
| **Network Info.** | This list shows information on your machine's network connection and configuration. |

*a.This menu only appears when an optional wireless network interface has been installed.*

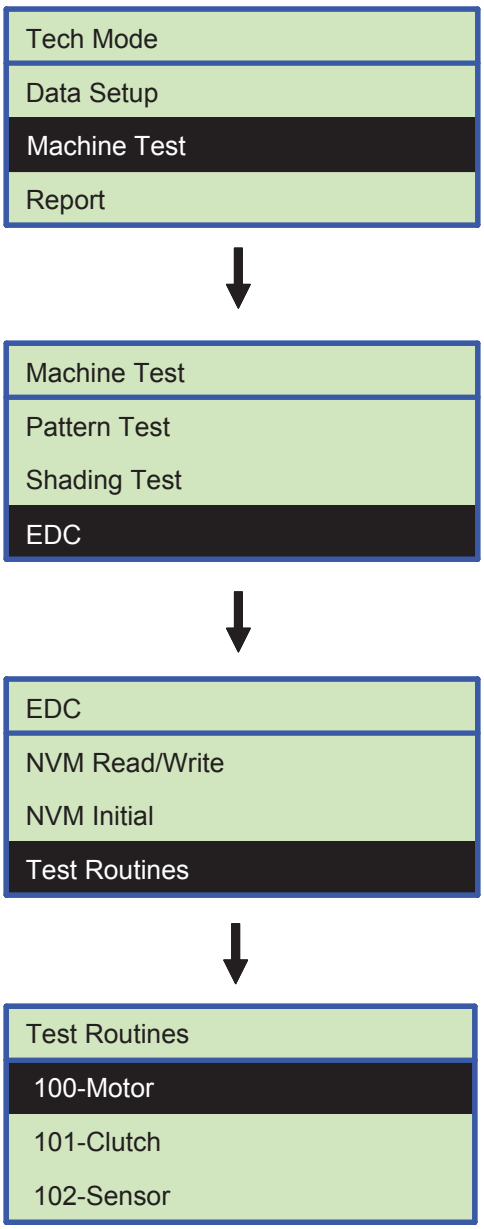
## 4.1.4 Tech Mode

In service (tech) mode, the technician can check the machine and perform various test to isolate the cause of a malfunction. While in Tech mode, the machine still performs all normal operations.

### To enter the Tech Mode

To enter the Tech Mode, press " **Menu + # + 1 + 9 + 3 + 4 + Menu**" in sequence, and the LCD briefly displays 'Tech Mode', the machine has entered service tech mode.

After entering the tech mode, select the item you want by using a button on control panel.
Below picutre shows to select the motor item in Test Routine.



## Tech Mode Menu Map

| Depth 1 | Depth 2 | Depth 3 | Depth 4 |
|---|---|---|---|
| Data Setup | Send Level | -9~-15 | -12 |
| | DTMF Level | [Hi]=xx,[Lo]=xx | |
| | Pause Time | 0~9 | |
| | Dial Mode | Tone,Pulse | Tone |
| | Modem Speed | 33.6, 28.8, 14.4, 12.0, 9.6, 4.8 | 33.6 |
| | Error Rate | 5%, 10% | 10% |
| | Clear All Mem. | | |
| | Toner Low Level | [1-30]% : 10 | |
| | Clear Count | Total Page Count | Enter Password |
| | | FLT Scan Count | |
| | | ADF Scan Count | |
| | Engine Footer | Off* | |
| | | On | |
| Machine Test | Switch Test | | |
| | REDUCE_PANEL | | |
| | | COMPLETE_PANEL | |
| | Test Param Set | | |
| | Modem Test | | |
| | Dram Test | | |
| | Rom Test | | |
| | Pattern Test | | |
| | EDC | NVM Read/Write | |
| | | NVM Initial | |
| | | Test Routines | |
| | Shading Test | Adjust Shading ? | Shading&Print |
| | Restart Machine | | |
| | TEST USB HOST | | |
| Report | All Report | | |
| | Protocol | | |
| | Supplies Info | | |
| | Configuration | | |
| | Error Info | | |
| | Usage Page | | |
| | ComponentCheck | | |
| | Service Support | | |

## Data Setup

### Send Level
You can set the level of the transmission signal. Typically, the Tx level should be under -12 dBm.
Caution : The Send Fax Level is set at the best condition in the shipment from factory. Never change settingsarbitrarily.

### DTMF Level
This is a setting value of the High level tone and low level tone at DTMF mode. (Not dial mode)

### Pause Time
It shows the delay time when receving the pause input at auto dial.

### Dial Mode
This function  can choose dial method.
*Default : Dial(Dial/Pulse)

### Modem Speed
You can set the maximum modem speed.Communication is done with modem speed automatically set at lower speed when communicating with a slower speed modem since communication is done on the standard of the side where modem speed is low for transmission/reception. It is best set 33.6Kbps as default setting.

### Error Rate
When the error rate is about exceed the set value, the Baud rate automatically adjusts to  2400 bps. This ensures that the error rate remains below the set value.You can select the rate between 5% and 10%.

### Clear All Memory
The function resets the system to factory default settings.This function is used to reset the system to the initial value when the product is functioning abnor-mally . All the values are returned to the default values, and all the information, which was set by the user, will be erased.
NOTICE : Always perform a memory clear after replacing the main board. Otherwise, the system may not operate properly.

### Toner Low Level
The function is to set up the time to inform toner low status. This function can provide user convenience for replacing the toner cartridge.

### Clear Count
This function resets Total Page Count, Flatbed Scan Count, ADF Scan Count.

### Engine Footer
This function is for monitoring of the engine status. If you perform this function, at printing, the setting value for engine is shown on the bottom of the printed page.

## Machine Test

### Switch Test
Use this feature to test all keys on the operation control panel. The result is displayed on the LCD window each time you press a key.

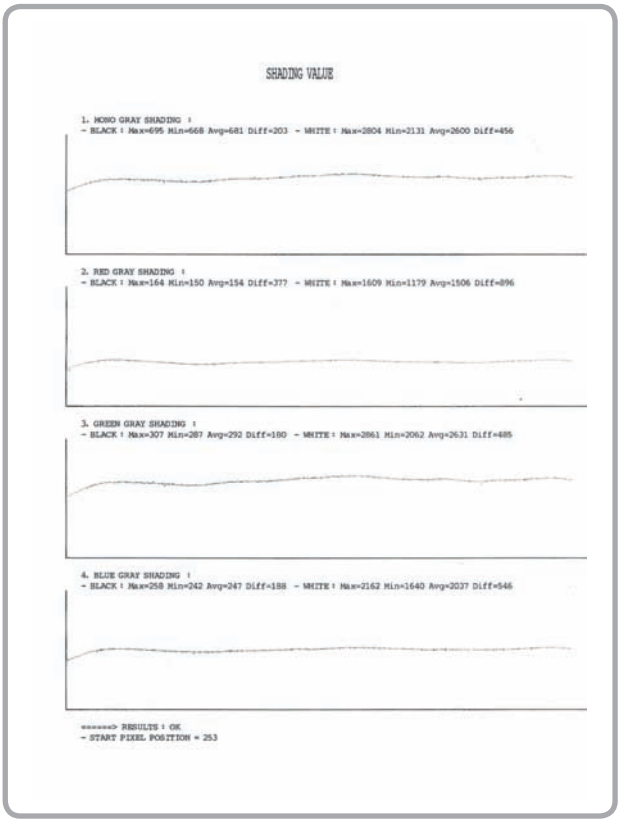
### Test Param Set (Handset Model only)
You can set the parmeter for handset standard.
Caution : The parameter value is set at the best condition in the shipment from factory.

### Modem Test
Use this feature to hear various transmission signals to the telephone line from the modem and tocheck the modem. If no transmission signal sound is heard, it means the modem part of the mainboard malfunctioned.

### Dram Test
Use this feature to test the machine's DRAM. The result appears in the LCD display.If all memory is working normally, the LCD shows << O K >>ROM TEST
Use this feature to test the machine'S ROM. The result and the software version appear in the LCD display.
• FLASH VER : 1.00 V
• ENGINE VER :1.00V

### Pattern Test
Using this pattern printout, you can check if the printer mechanism is functioning properly.It is needed in the production progress. Service person doesn't need to use it.

### Shading Test
The function is to get the optimum scan quality by the specific character of the CCD(ChargeCoupled Device). If the copy image quality is poor, perform this function to check the conditionCCD unit.




### EDC
There are 3 sub item in this menu.
They are NVM Read/Write, NVM initial, Test Routines.
Use this function to check the status of the components in the machine.

### Restart Machine
You can reboot the machine by using a key without mechanic rebooting.

### Test USB HOST

## Test Routines (EDC sub menu)

| Depth 1 | Depth 2 | Meaning | State Displayed |
|---|---|---|---|
| 100-Motor | 0000-Main BLDC | Main BLDC Motor is On/Off | On[Off] |
| | 0120-Exit Mot Fwd | Exit Motor Forward Fast On/Off | On[Off] |
| | 0140-Dup Mot Fwd | Duplex Motor Forward On/Off | On[Off] |
| | 0150-Dup Mot Bwd | Duplex Motor Backward On/Off | On[Off] |
| | 0160-Dup Fan1Run | Start/Stop Duplex Fan1 run | On[Off] |
| | 0260-SMPS Fan | Start/Stop Deve. Fan run | On[Off] |
| 101-Clutch | 0000-MP Feed Clutch | Engages drive to pick up a paper from bypass Tray(MP Tray). | On[Off] |
| | 0010-Tray1 Pickup | Engages drive to pick up a paper from tray1. | On[Off] |
| | 0020-Tray2 Pickup | Engages drive to pick up a paper from tray2. (Optional) | On[Off] |
| | 0050-Registration | Engages drive to registartion rolls. | On[Off] |
| | 0130-Tray2 Feed Mot | Tray2 Feed Motor On/Off | On[Off] |
| | 0170-OutBin Full | Detect when paper is at outbin full sensor | On[Off] |
| 102-Sensor | 0010-Tray1 Empty | Detect when paper is in Tray1. | High[low] |
| | 0080-Tray2 Empty | Detect when paper is in tray2. | High[low] |
| | 0280-MP Empty | Detects when paper is in Bypass Tray(MP Tray). | High[low] |
| | 0290-Feed Sensor | Detect when a paper is at Feed sensor. | High[low] |
| | 0360-Regi Sens | Detect when a paper is at Regi. sensor. | High[low] |
| | 0370-Exit Sens | Detect when a paper is at Exit. sensor. | High[low] |
| | 0380-Dup Jam1 | Detect when a paper is at Duplex Jam1 sensor. | High[low] |
| 105-MHV Bias | 0030-B MHV Bias | Black MHV bias voltage on at normal drive level | On[Off] |
| 106-DEV Bias | 0030-B Dev Bias | Black Dev bias voltage on at normal drive level | On[Off] |
| 107-Transfer Bias | 0030-B THV Bias | Black THV bias voltage on at normal drive level | On[Off] |
| | 0070-B THV Read | Detect what the THV value is on the THV Roller | Numeric 3 digits |
| | 0120-THV-Ve | ATTR plus bias voltage on at normal drive level | On[Off] |
| 109-Fuser Heater | 0000-Temp A | Detects what the temperature A is on fuser. | Numeric 3 digits |
| | 0040-Fan Run | Fuser Fan Motor On/Off | On[Off] |
| | 0050-Bias | Fuser bias voltage on at normal drive level | On[Off] |
| | 0090-Power On | It controls temperature of fuser as 180 degrees. | On[Off] |
| 110-LSU | 0000-Motor1 Rdy | Detects if LSU motor1 runs at normal speed. | High[Low] |
| | 0060-Motor1 Run | LSU Motor1 On/Off | On[Off] |
| | 0110-LD Power4 | LSU LD4 Power On/Off (black) | On[Off] |

## Report

### All Report
You can print all report at the same time.

### Protocol
Protocol list shows the sequence of the CCITTgroup 3 T.30 protocol during the most recent sending or receivingoperation. Use this list to check for send and receive errors.

### Supplies info
Supplies Information Report shows toner cartridge information such as toner remaining, toner capacity, toner product date etc.

### Configuration
Configuration report shows the status of the user-selectable options. You may print this list to confirm your changes after changing settings. This page provides useful information for service.

### Error Info
Error Information Report shows error records.

### Usage page
Usage page report shows usage page counts since service date. It shows total counts of the simplex print and dupex print.

### Component Check
Component Check Report shows the operation procedure of the machine test in tech mode.

### Service Support
Customer Assistance Report shows the country setting procedure, F/W upgrade procedure, printing a Test pattern page.

## Configuration Report

### Configuration Report

Date/Time : 2008-OCT-20 04:56PM MON
Fax Number :
Fax Name :
Model Name : SCX-5635 Series

| Options | Item | Status |
|---|---|---|
| Default Copies | [1-99] | 1 |
| Default Reduce/Enlarge | [Org.(100%)/LGL->LTR(78%)...] | Org.(100%) |
| Default Darkness | [Light/Normal...] | Normal |
| Default Original Type | [Text/ Text/Photo...] | Text |
| Contrast | [Light/Normal...] | Normal |
| Resolution | [Standard/Fine...] | Standard |
| Ring To Answer | [1-7] | 1 |
| Receive Mode | [Fax/Tel...] | Fax |
| Redial Term | [1-15] | 3 |
| Redial Times | [0-13] | 2 |
| Send Report | [On/Off...] | On-Err |
| Auto Report | [On/Off] | On |
| Auto Reduction | [On/Off] | On |
| Discard Size | [0-30] | 20 mm |
| RCV Start Code | [0-9] | *9* |
| Paper Size(Tray1) | [Letter/A4...] | A4 |
| Paper Size(Manual Feeder) | [Letter/A4...] | A4 |
| Copy Tray | [Tray1/Tray2...] | Auto |
| Fax Tray | [Tray1/Tray2...] | Auto |
| Paper Type(Tray1) | [Plain Paper/Bond...] | Plain Paper |
| Paper Type(Manual Feeder) | [Plain Paper/Bond...] | Plain Paper |
| Send Forward/RCV Forward | [On/Off...] | Off/Off |
| Junk Fax Setup | [On/Off] | Off |
| Secure Receive | [On/Off] | Off |
| Prefix Dial | [Fax Number] | |
| Stamp RCV Name | [On/Off] | Off |
| ECM Mode | [On/Off] | On |
| Image TCR | [On/Off] | On |
| Speaker | [On/Off...] | Comm. |
| Ringer | [Off/Low...] | Mid |
| Key Sound | [On/Off] | Off |
| Alarm Sound | [On/Off] | On |
| Clock Mode | [12 Hour/24 Hour] | 12 Hour |
| Language | [English/Korean...] | Korean |
| Default Mode | [Fax/Copy] | Copy |
| Power Save | [5/10/15...] | 30 Min |
| Timeout | [15/30/60...] | 30 Sec |
| Altitude Adjustment | [Plain/High...] | Plain |
| Send Level | [9-15] | -12 dB |
| Modem Speed | [33.6/28.8...]Kbps | 33.6 Kbps |
| Error Rate | [5%/10%] | 10% |

| | | |
|---|---|---|
| Firmware/Engine Version | : 2.01.80.031 | 1.30.73 |
| Emulation Version | : PCL5e 5.81 08-08-2008 | PCL6 5.83 08-05-2008 |
| | PS3 1.85.166 06-11-2008 | PDF V1.00.68 08-12-2008 |
| | TIFF 0.89.00 06-16-2008 | KS/KSSM 5.05 05-26-2008 |
| | KSC5895 5.06 05-26-2008 | KS/KSSM 5.05 05-26-2008 |
| Installed Date | : 2008. 10. 6 | |
| Total Page Counts | : 61 | |
| CRU Prints/Toner Remaining | : 61 | 99% (P4.51) |
| Capacity/Serial | : 4 K | CRUM-08090577577 |
| ADF/Platen Scan Page Counts | : 0 | 0 |
| IP Address/Memory Size | : 192.0.0.192 | 128 Mbyte |

## Supplies Information Report

Supplies Information Report

Date/Time : 2008-OCT-20 04:56PM MON
Fax Number :
Fax Name :
Model Name : SCX-5635 Series

---

[ System Information ]
Total Page Counts : 61

[ Scan Information ]
ADF Scan Page Counts : 0
Platen Scan Page Counts : 0

[ Toner Cartridge Information ]
Toner Remaining : 99%
Equivalent page printed : 56 (Pages)
Average Area Coverage : 4.51%

Dotcounts : 77990000
Page Count : 61
Motor on time : 168 sec 100%(Life Remaining)
Clear Toner : 0
Replaced Toner Counts : 1
Supplier ID : MT583DOM

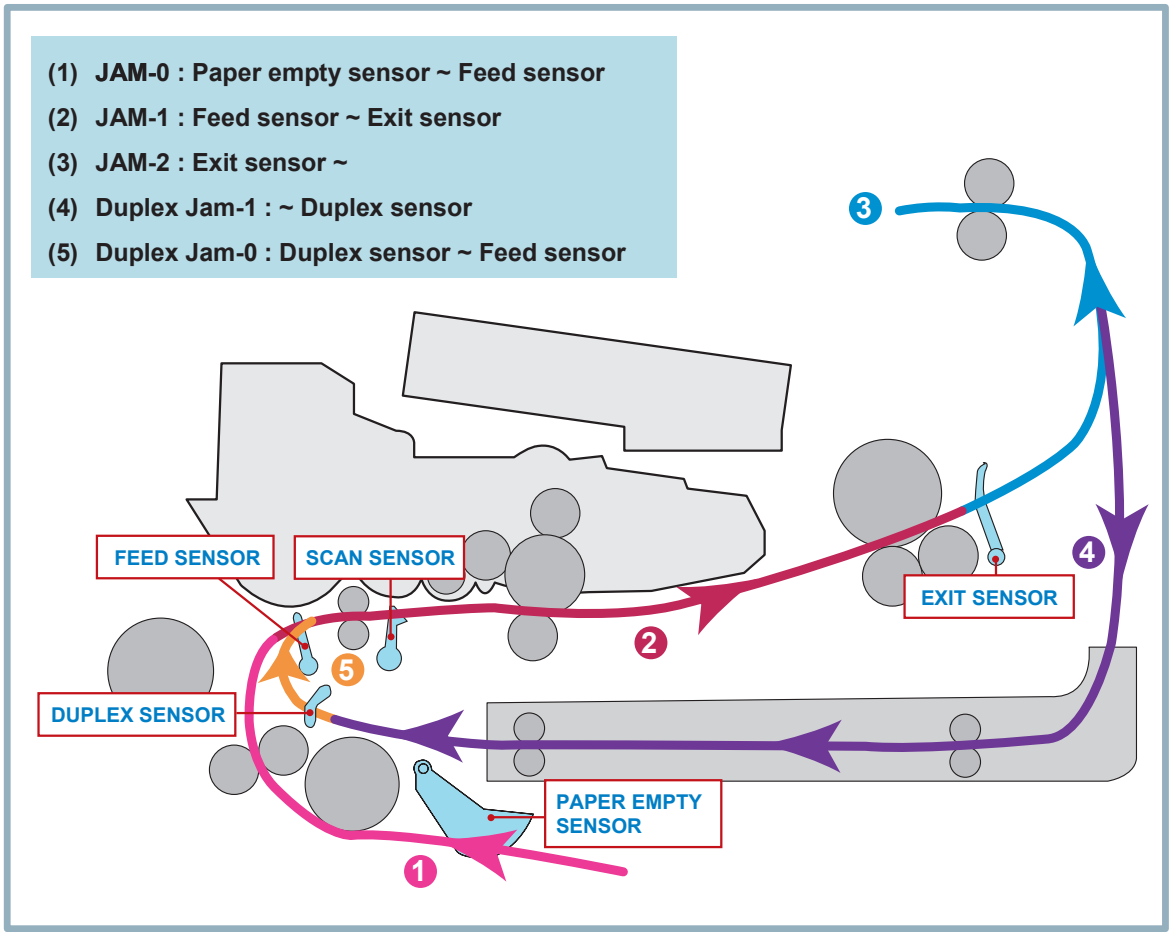
Capacity : 4 K
Supplier : SAMSUNG(KOREA)
Serial : CRUM-08090577577
Product Date : 20080905
Installed Date : 20081006

## 4.1.5 Clearing Paper Jams

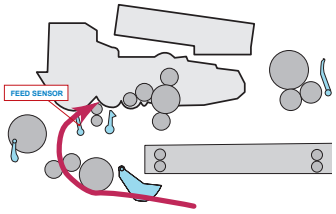
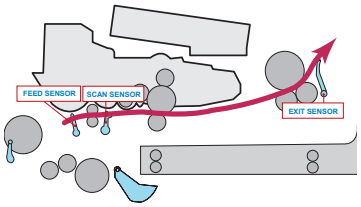
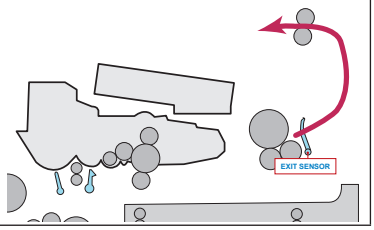
Occasionally, paper can be jammed during a print job. Some of the causes include:
• The tray is loaded improperly or overfilled.
• The tray has been pulled out during a print job.
• The front cover has been opened during a print job.
• Paper was used that does not meet paper specifications.
• Paper that is outside of the supported size range was used.

If a paper jam occurs, LCD window will show the error message. Find and remove the jammed paper. If you don't see the paper, open the covers.
Do not use a pinset or a sharp metal tool when removing a jam.
The covering of a metal part can be removed which can cause an electric leakage.

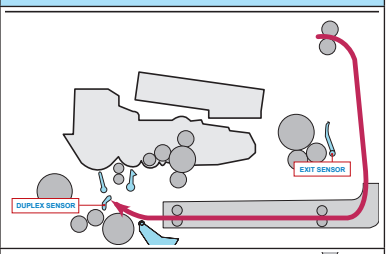
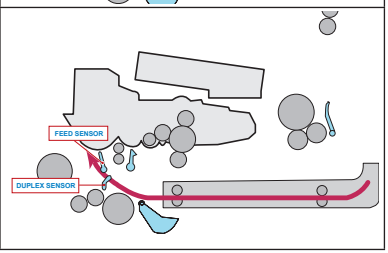
### ■ Description of ENGINE JAM type (Layout)



## ■ Description of ENGINE JAM type (Simplex)

| Type | Case | Jam Removal | Jam Layout |
|---|---|---|---|
| Jam 0 | Leading edge of media does not arrive at registration within a certain time after pick-up(If fails at a time,it tries pick-up again) | 1. Pull out cassette<br>2. Remove jammed paper |  |
| Jam 1 | Leading edge of media does not arrive at Exit Sensor within a certain time after registration | 1. Open front cover<br>2. Pull out toner cartridge<br>3. Remove jammed paper |  |
| Jam 2 | Trailing edge of media does not leave Exit Sensor within a certain time after touching registration | 1. Open rear cover<br>2. Pull down jam lever on fuser unit and open fuser cover)<br>3. Remove jammed paper from exit |  |

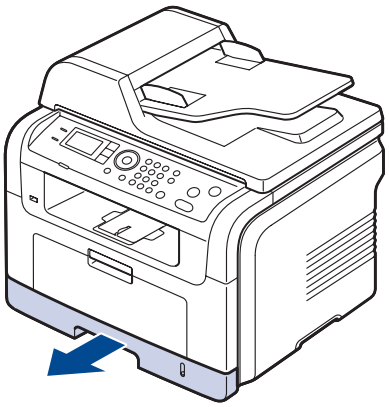
## ■ Description of ENGINE JAM type (Duplex)

| Type | Case | Jam Removal | Jam Layout |
|---|---|---|---|
| Duplex Jam 1 | Trailing edge of media leaves Exit Sensor, and does not arrive at Duplex Sensor | 1. Open rear cover<br>2. Remove jammed paper<br>OR<br>1. Pull out duplex unit<br>2. Remove jammed paper from duplex unit |  |
| Duplex Jam 0 | Leading edge of media does not arrive at registration within a certain time after touching Duplex Sensor | 1. Open rear cover<br>2. Remove jammed paper<br>OR<br>1. Pull out duplex unit<br>2. Remove jammed paper from duplex unit |  |

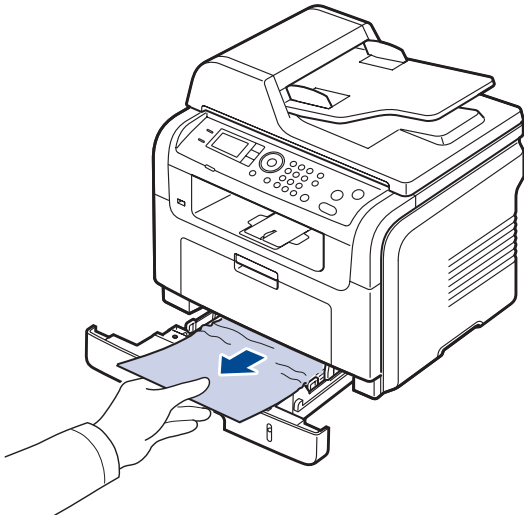
## In Tray 1

1. Open and close the front door. The jammed paper is automatically ejected from the machine. If the paper does not exit, go to the next step.

2. Pull out tray 1 .



3. Remove the jammed paper by gently pulling it straight out.



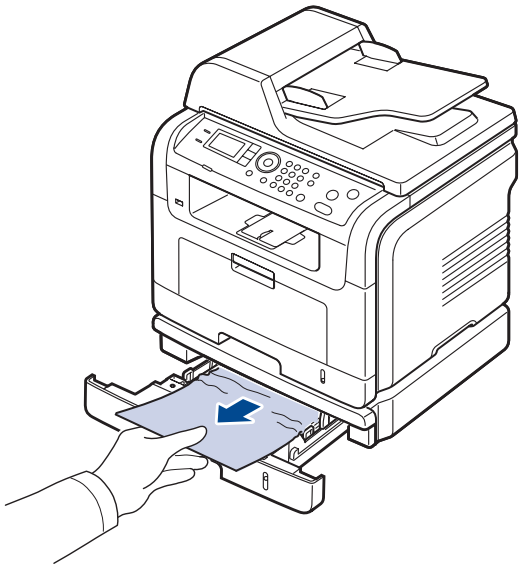
If the paper does not move when you pull, or if you do not see the paper in this area, check the fuser area around the toner cartridge.

4. Insert tray 1 back into the machine until it snaps into place. Printing automatically resumes.

## In optional tray 2

1. Pull out optional tray 2.

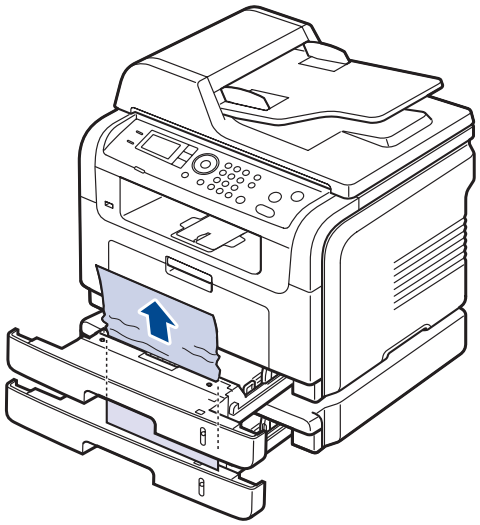
2. Remove the jammed paper from the machine.



If the paper does not move when you pull or if you do not see the paper in this area, stop and go to the next step.

3. Pull tray 1 half-way out.

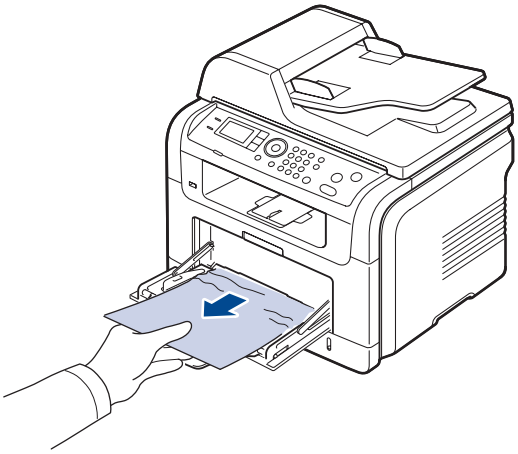
4. Pull the paper straight up and out.



5. Insert the trays back into the machine. Printing automatically resumes.

## In the multi-purpose tray

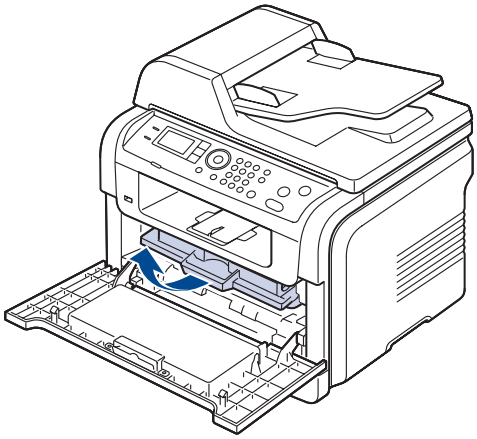
1. If the paper is not feeding properly, pull the paper out of the machine.



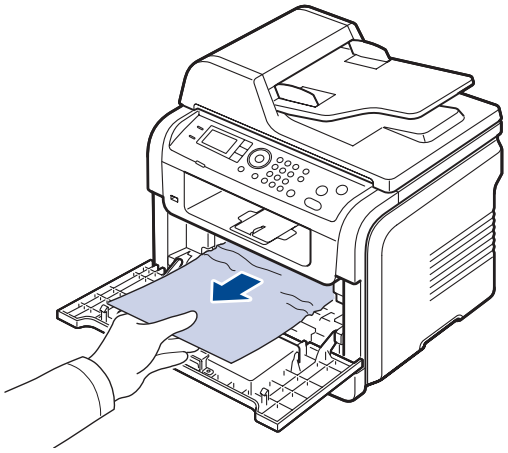
2. Open and close the front door to resume printing.

## Inside the machine

1. Open the front door and pull the toner cartridge out, lightly pushing it down.



2. Remove the jammed paper by gently pulling it straight out.

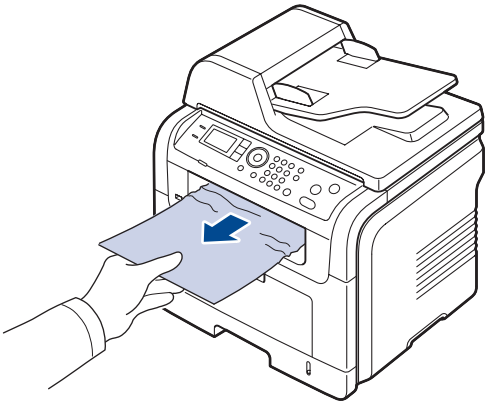


3. Replace the toner cartridge and close the front door. Printing automatically resumes.

## In exit area

1. Open and close the front door. The jammed paper is automatically ejected from the machine. If you do not see the jammed paper, go to next step.

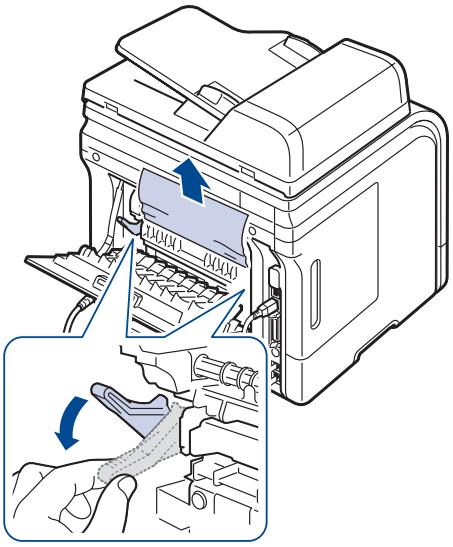
2. Gently pull the paper out of the output tray.



If you do not see the jammed paper or if there is any resistance when

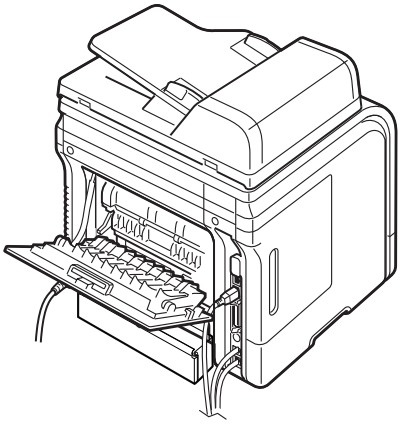
3. Open the rear door.

4. If you see the jammed paper, push the pressure lever on each side up and remove the paper. Skip to step 9.

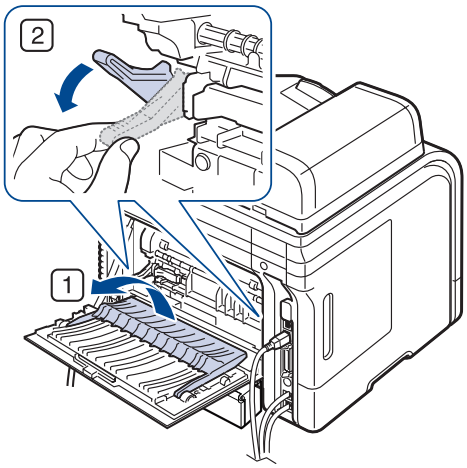


If you still do not see the paper, go to the next step.

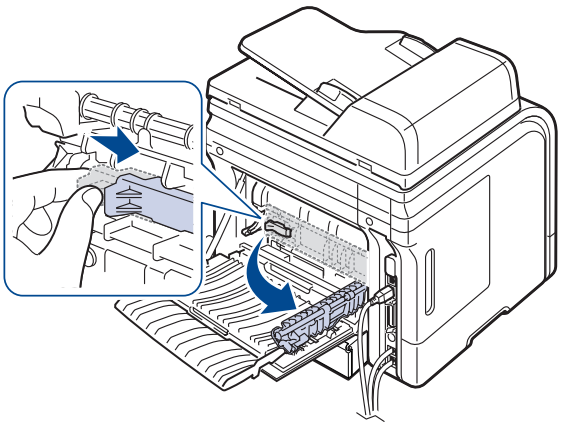
5. Fully open the rear door, as shown.



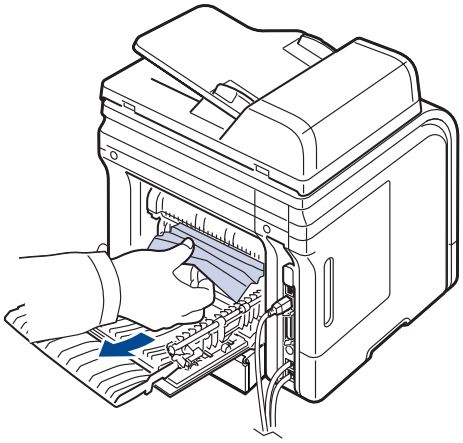
6. Unfold the duplex guide fully and release the pressure lever on each side.




7. While pushing the fuser lever to the right, open the fuser door.



8. Pull the jammed paper out.



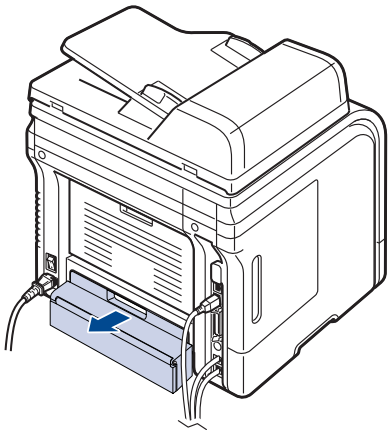
9. Return the lever, door, and guide to their original position.

10. Close the rear door. Printing automatically resumes.

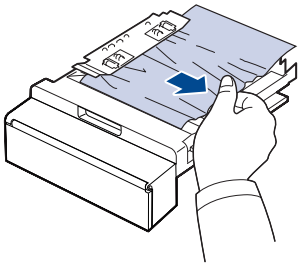
## In the duplex unit area

If the duplex unit is not inserted correctly, a paper jam may occur. Make sure that the duplex unit is inserted correctly.

1. Pull the duplex unit out of the machine.

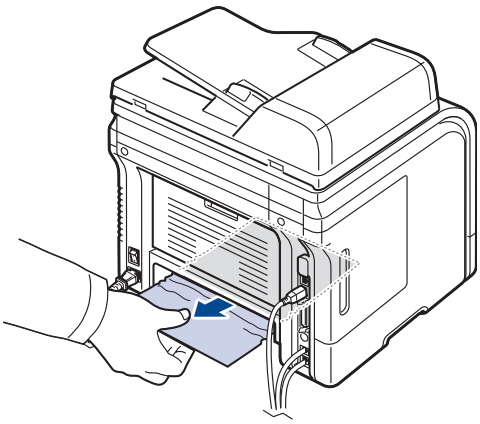


2. Remove the jammed paper from the duplex unit.



If the paper does not come out with the duplex unit, remove the paper from the bottom of the machine.

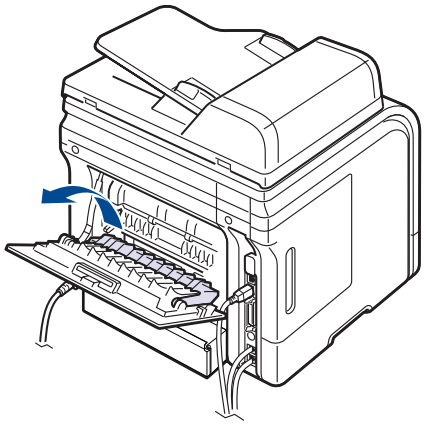
Insert the duplex unit into the machine.



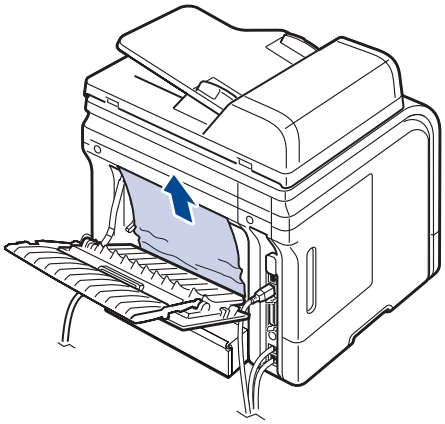
If you still do not see the paper, go to the next step.

3. Open the rear door.

4. Unfold the duplex guide fully.



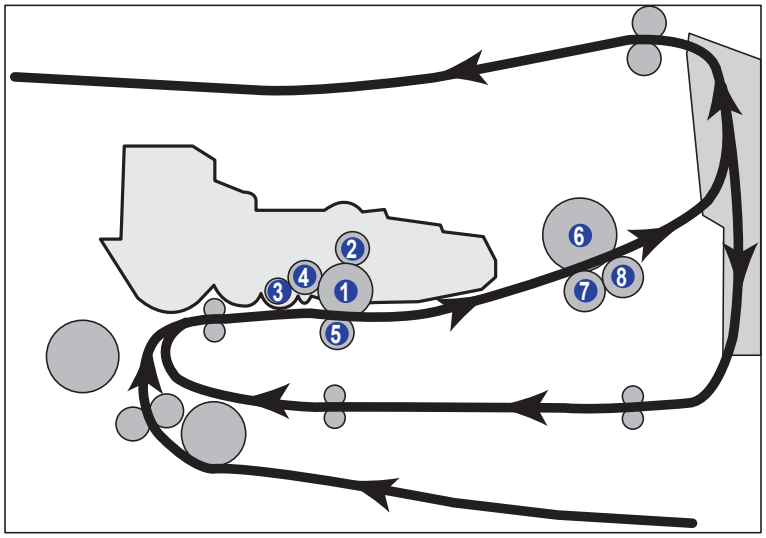
5. Pull the jammed paper out.



6. Fold the duplex guide and close the rear door.

## 4.1.6 Abnormal Image Printing and Defective Roller

If abnormal image prints periodically, check the parts shown below.




1. OPC Drum
2. Charge Roller
3. Supply Roller
4. Developing Roller
5. Transfer Roller
6. Heat Roller
7. Pressure Roller1
8. Pressure Roller2

| No | Roller | Abnormal image period | Kind of abnormal image |
|---|---|---|---|
| 1 | OPC Drum | 75.5mm | White spot, Block spot |
| 2 | Charge Roller | 37.7mm | Black spot |
| 3 | Supply Roller | 51mm | Horizontal density band |
| 4 | Develop Roller | 39mm | Horizontal density band |
| 5 | Transfer Roller | 47.1mm | Black side contamination/transfer fault |
| 6 | Heat Roller | 77.8mm | Black spot and fuser ghost |
| 7 | Pressure Roller1 | 62.8mm | Black side contamination |
| 8 | Pressure Roller2 | 50.2mm | Black side contamination |

## ■ Repetitive defect Image check page

Print this page. Align the this page and the printed defect image and find the defective roller.

## 4.1.7 Error Message

Messages appear on the control panel display to indicate the machine's status or errors. Some error messages are shown with graphics to help you troubleshoot problem.

### Checking display messages

1. When errors occur, Check Status appears on the display and press OK.
2. Check the display message to see what kind of error has occured.
   If several messages appear, press the up/down arrow to highlight the message you want solve.
3. Press OK on the control panel.
   Refer to the tables below to understand the messages' and their meaning, and solve the problem, if necessary.

- If Check Status still appears, repeat above steps.
- If a message is not in the table, reboot the power and try the printing job again. If the problem persists, call for service.
- When you call for service, provide the service representative with the contents of display message.
- Some messages may not appear in the display depending on options or models.
- [xxx] indicates the media type.

| Message | Meaning | Suggested Solutions |
|---|---|---|
| **BOOTP problem BOOTP has a problem. Reconfigure DHCP/static IP** | There is a problem with the network. | Check your network environment. You can change the network setting to DHCP or STATIC. |
| **BOOTP problem BOOTP has a problem. Switching to Auto IP** | There is a problem with the network. | Check your network environment. You can change the network setting to DHCP or STATIC. |
| **Connection Error** | Connection with the SMTP server failed. | Check the server settings and the network cable. |
| **Data Read Fail Check USB key** | Time expired while reading date. | Try again. |
| **Data Write Fail Check USB key** | Storing to the USB memory failed. | Check the available USB memory space. |
| **DHCP problem DHCP has a problem. Reconfigure BOOTP/ static IP** | There is a problem with the network. | Check your network environment. You can change the network setting to BOOTP or STATIC. |
| **DHCP problem DHCP has a problem. Switching to Auto IP** | There is a problem with the network. | Check your network environment. You can change the network setting to BOOTP or STATIC. |
| **Door is open. Close it** | The front door is not securely latched. | 1. Close the door. If the message is not disappeared, check the below steps.<br>2. Check that the door switch is pushed.<br>3. Check that the LCD message is changed by door switch action. |

| Message | Meaning | Suggested Solutions |
|---|---|---|
| **Fax memory is almost full** | Fax memory is almost full. | Press the left/right arrow to highlight Cancel or Start, then press OK. If you select Cancel , the machine stops the fax job. If you select Start, the machine only sends scanned documents of the fax job. |
| **Fax unit error<br>Error: #10-002<br>Turn off then on** | The fax card is not installed properly or is out of order. | 1. Check the Fax card connector.<br>2. Replace the Fax Card.<br>3. If the problem persists, replace the PBA-MAIN. |
| **File Format is Not Supported.** | The selected file format is not supported. | Use the correct file format. |
| **Group Not Available** | You have tried to select a group location number where only a single location number can be used, such as when adding locations for a multiple send operation. | Use a speed dial number or dial number manually using the number keypad. |
| **IP Conflict<br>This IP address conflicts with that of other system** | The IP address is used elsewhere. | Check the IP address or obtain a new IP address. |
| **Jam bottom of duplex** | Paper has jammed during duplex printing. | 1. Remove the duplex unit and remove the jammed paper.<br>2. Open the rear door and remove the jammed paper.<br>3. Check the duplex jam1 sensor on EDC mode. |
| **Jam in exit area** | Paper has jammed in exit area. | 1. Remove the jammed paper from output tray. If you don't see the jammed paper, open the rear door and remove the jammed paper.<br>2. Check the exit sensor. If it is defective, replace it. |
| **Jam inside machine** | Paper has jammed inside the machine. | 1. Open the front door and remove the toner cartridge. Remove the jammed paper.<br>2. If the paper is removed but message is displayed, check the Regi.sensor on EDC mode. If it is defective replace it.<br>3. Check the exit sensor. If it is defective, replace it. |

| Message | Meaning | Suggested Solutions |
|---|---|---|
| **Jam top of duplex** | Paper has jammed during duplex printing. | 1. Remove the duplex unit and remove the jammed paper.<br>2. Open the rear door and remove the jammed paper.<br>3. Check the duplex jam1 sensor on EDC mode. |
| **Junk Fax Error**<br>**Junk Fax Job Cancelled** | The machine has received a fax from which is registered as a junk fax. | The received fax data will be deleted. Reconfirm junk fax setup. |
| **Line Busy**<br>**The line is already engaged. Try later** | The receiving fax machine did not answer or the line is already engaged. | Try again after a few minutes. |
| **Line Error**<br>**The Fax Line has a problem. Try again** | Your machine cannot connect with the receiving fax machine or has lost contact because of a problem with the phone line. | Try again. If the problem persists, wait an hour or so for the line to clear again. Or, turn the ECM mode on |
| **Low Heat error**<br>**Error: #02-001**<br>**Turn off then on** | 1. At warm up, the temperature keep up the lower temperature for regular time.<br>2. In case that the temperature has not reached warm up temperature after warm-up time.<br>3. At ready, Less than target temperature and for more than 10 sec.<br>4. At printing, Less than printing Ref. temp and for more than 10 sec. | 1. Measure the resistance value of the thermostat. Is it infinite? Replace the thermostat.<br>2. Measure the resistance value of the lamp. Is it infinite? Replace the fuser unit.<br>3. Check that the fuser connector is connected properly.<br>4. Measure the resistance value of the thermistor. Is it infinite? Replace the thermistor.<br>5. Replace the fuser unit. |
| **LSU error**<br>**Error: #04-001**<br>**Turn off then on** | After LD on, the Laser beam detect signal is not occurred or irregular. | 1. Replace the Main board.<br>2. If the problem persists after replacing the Main board, replace the LSU unit. |
| **LSU error**<br>**Error: #04-002**<br>**Turn off then on** | LSU motor does not operate or the drive signal is abnormal. | 1. Replace the LSU unit<br>2. Check the 24V power. If the voltage is not occurred, replce the SMPS board.<br>3. Check the motor connector, MAIN-PBA connector. |
| **Mail Size Error**<br>**Mail exceeds than server support** | The mail size is larger than the supported size by SMTP server. | Divide your mail or reduce the resolution. |
| **Mail Size Error**<br>**One Page is Too Large** | Single page data exceeds the configured mail size. | Reduce the resolution and try again. |

| Message | Meaning | Suggested Solutions |
|---|---|---|
| **Memory Failure<br>Error: #10-001<br>Turn off then on** | At system booting, memory is not read. | Enter the Tech mode. Check the Dram Test. If the memory is defective, replace it. |
| **Memory Full<br>Fax memory is full.<br>Print or remove received fax job** | The memory is full. | Print or remove the received fax data in the memory. |
| **Network problem<br>Communication problem occurred with network board** | Communication problem occurred with network board. | Replace the PBA-MAIN. |
| **Network Problem<br>Network cable is not connected.<br>Check it** | Network cable is not connected. | Connect the machine to the network with a network cable. |
| **Network Problem<br>Network card is not installed.<br>Check it** | Network card is not installed. | 1. Turn off the machine and reboot it.<br>2. Replace the PBA-MAIN. |
| **Output bin Full<br>Output bin Full.<br>Remove printed paper** | The document output tray is full. | Remove the paper from output tray. |
| **Original paper Jam<br>Original paper jam inside of scanner.<br>Remove Jam** | The load original has jammed in the document feeder. | 1. Remove all documents on DADF.<br>2. Open the DADF door and remove the jammed paper. |
| **Over Heat error<br>Error: #02-002<br>Turn off then on** | 1. At warm up, the temperature keep up the lower temperature for regular time.<br>2. At warm up, after temperature checking time, more than regular temperature and for more 30 sec.<br>3. At standby or not sleep, more than Top temp and for a few minutes.<br>4. At power save mode, the temperature keep up the constant for regular time. | 1. Measure the resistance value of the thermostat. Is it infinite? Replace the thermostat.<br>2. Measure the resistance value of the lamp. Is it infinite? Replace the fuser unit.<br>3. Check that the fuser connector is connected properly.<br>4. Measure the resistance value of the thermistor. Is it infinite? Replace the thermistor.<br>5. Replace the fuser unit. |

| Message | Meaning | Suggested Solutions |
|---|---|---|
| **Paper Jam in MP tray** | Paper has jammed in the feeding area of the MP tray. | 1. Remove the paper from MP tray.<br>2. If pick up roller does not rotate , check the pick up clutch.<br>3. If Pickup roller is rotating but the paper is not feeding, replace the pick up rubber.<br>4. Check the feed sensor. If it is defective, replace it. |
| **Paper Jam in tray1** | Paper has jammed in the feeding area of the tray1. | 1. Remove the paper from tray1.<br>2. If pick up roller does not rotate , check the pick up clutch.<br>3. If pickup roller is rotating but the paper is not feeding, replace the pick up rubber.<br>4. Check the feed sensor. If it is defective, replace it. |
| **Paper Jam in tray2** | Paper has jammed in the feeding area of the tray2. | 1. Remove the paper from tray2.<br>2. If pick up roller does not rotate , check the pick up clutch.<br>3. If pickup roller is rotating but the paper is not feeding, replace the pick up rubber.<br>4. Check the feed sensor. If it is defective, replace it. |
| **Paper Empty in MP**<br>**Paper is empty in MP tray.**<br>**Load paper** | There is no paper in the MP tray. | 1. Load the papers in the MP Tray.<br>2. Check the MP empty sensor on EDC mode.<br>3. If it is defective, replace it. |
| **Paper Empty in tray1**<br>**Paper is empty in tray1.**<br>**Load paper** | There is no paper in the tray1. | 1. Load the papers in the Tray1.<br>2. Check the Tray1 empty sensor on EDC mode.<br>3. If it is defective, replace it. |
| **Paper Empty in tray2**<br>**Paper is empty in tray2.**<br>**Load paper** | There is no paper in the tray2. | 1. Load the papers in the Tray2.<br>2. Check the Tray2 empty sensor on EDC mode.<br>3. If it is defective, replace it. |
| **Paper mismatch MP**<br>**Load [A4] [Plain]**<br>**Continue ⊙ Cancel X** | The paper size specified in the printer properties does not match the paper you are loading. | You can select the option between Continue or Cancel. If you select Cancel , the printing job will stop. Load the correct paper in the tray. If you select Continue, printing job will continue. |
| **Paper mismatch Tray1**<br>**Load [A4] [Plain]**<br>**Continue ⊙ Cancel X** | The paper size specified in the printer properties does not match the paper you are loading. | You can select the option between Continue or Cancel. If you select Cancel , the printing job will stop. Load the correct paper in the tray. If you select Continue, printing job will continue. |

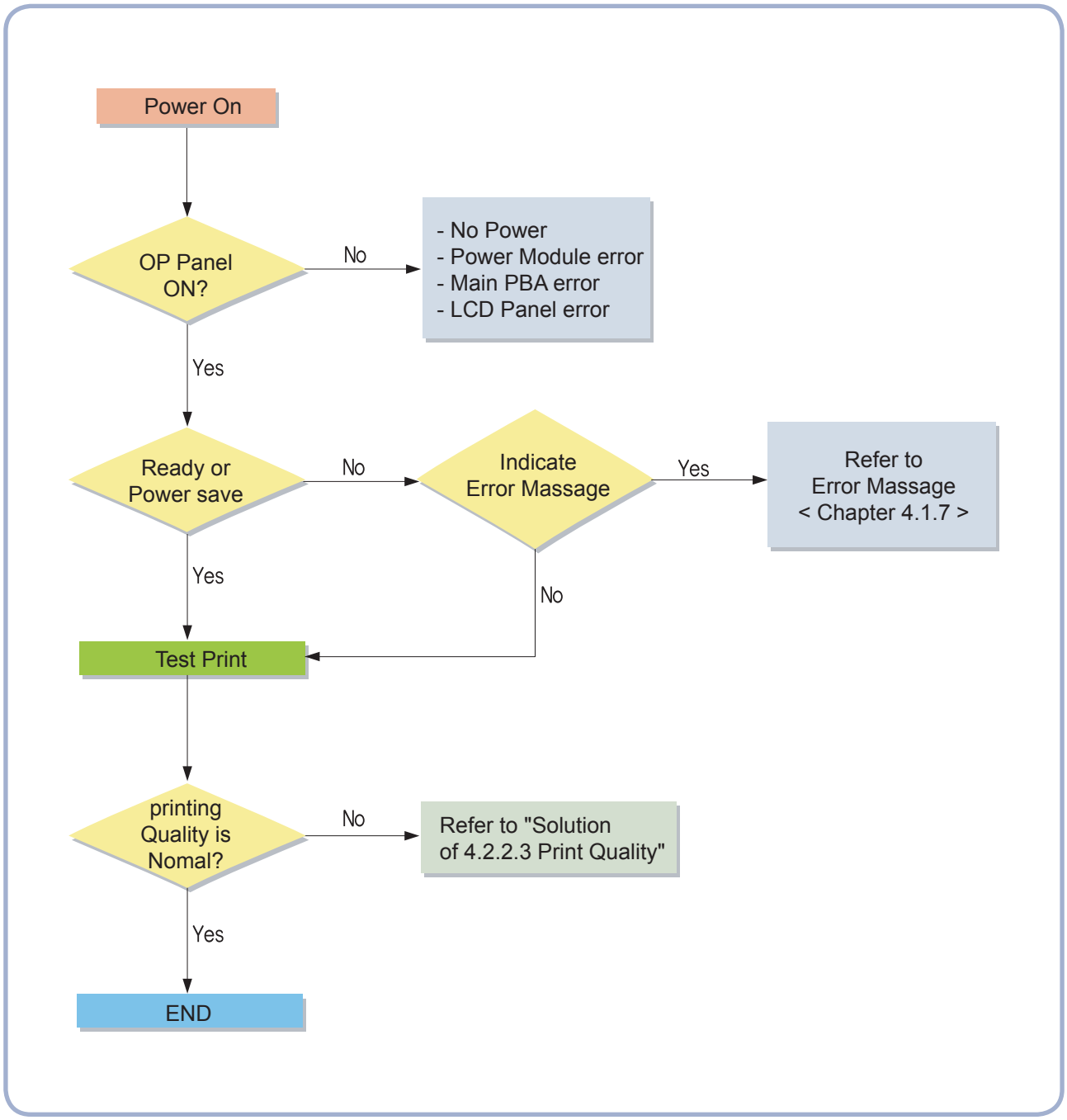
| Message | Meaning | Suggested Solutions |
|---|---|---|
| **Paper mismatch Tray2 Load [A4] [Plain] Continue ⊙ Cancel X** | The paper size specified in the printer properties does not match the paper you are loading. | You can select the option between Continue or Cancel. If you select Cancel , the printing job will stop. Load the correct paper in the tray. If you select Continue, printing job will continue. |
| **Pickup roller is worn MP pickup roller is worn. Replace with new one** | The pickup roller has reached the end of its lifespan. | Replace pick-up roller of MP tray |
| **Pickup roller is worn Tray pickup roller is worn. Replace with new one** | The pickup roller has reached the end of its lifespan. | Replace pick-up roller of tray1 |
| **Pickup roller is worn Tray2 pickup roller is worn. Replace with new one** | The pickup roller has reached the end of its lifespan. | Replace pick-up roller of tray2. |
| **Replace New Toner Replace with New Toner** | The toner cartridge has reached the end of its lifespan. | Replace the toner cartridge with a Samsung-genuine toner cartridge. |
| **Scanner door Open Door of scanner is open. Close it** | Door of scanner is open. | Close the scanner door. |
| **Scanner locked Scanner locking switch is locked. Release it** | The scanner module is locked. | 1. Unlock the scanner lock switch.<br>2. Check the CCDM is moving at power on.<br>3. Check the connection of CCDM module flat cable.<br>4. Check the belt unit or gears.<br>5. Replace the ADF board. |
| **Scanner problem Communication problem occurred with scanner unit** | Communication problem occurred with scanner unit | 1. Check the harness connecting ADF board and PBA-MAIN.<br>2. Replace the ADF board.<br>3. Replace the PBA-MAIN. |
| **System error Error: #02-000 Turn off then on** | Fuser has some problems. | 1. Remove the fuser unit and re-install it.<br>2. Replace the fuser unit.<br>3. Replace the SMPS board. |
| **System error Error: #10-004 Turn off then on** | Communication problem occurred. | 1. Check the harness connecting OPE PBA and PBA-MAIN.<br>2. Replace the OPE PBA.<br>3. Replace the PBA-MAIN. |
| **Toner cartridge error Error: #06-006/7/20 Open/close door** | Toner Cartridge is not installed properly or S-chip is defective. | 1. Take out the toner cartridge and re-install it.<br>2. Replace the toner cartridge. |

| Message | Meaning | Suggested Solutions |
|---|---|---|
| **Too many Faxes**<br>**Too many faxes are received. Print or remove job** | Too many faxes are received | Print or remove received fax. |
| **Toner is worn**<br>**Toner is worn. Replace with new one** | The toner cartridge is near the end of its lifespan. | You can select the option among Stop or Continue. If you select Stop, the machine stops printing. If you select Continue, the machine keeps printing, but the quality cannot be guaranteed. |
| **Toner Not Compatible**<br>**Toner cartridge is not compatible. Check guide** | The toner cartridge you have installed is not for your machine. | Install a Samsung-genuine toner cartridge designed for your machine. |
| **Toner Not Installed**<br>**Toner cartridge is not installed. Install it** | The toner cartridge is not installed. | Install the toner cartridge. |
| **Tray2 has a problem**<br>**Communication problem occurred with Tray2** | The machine cannot communicate the optional tray 2. | 1. Check the cable connecting the machine and the optional tray 2.<br>2. Replace the PBA of the tray2.<br>3. Replace the MAIN-PBA. |
| **Tray2 Not Installed**<br>**Tray2 is not installed** | The optional tray2 is not installed. | 1. Re-install the tray2.<br>2. Check the cable connecting the machine and the optional tray 2.<br>3. Replace the PBA of the tray2.<br>4. Replace the MAIN-PBA. |

# 4.2 Troubleshooting

## 4.2.1 Procedure of Checking the Symptoms

Before attempting to repair the printer first obtain a detailed description of the problem from the customer.



## 4.2.2 Solution

### 4.2.2.1 Scanner

**COPY**

| PROBLEM | ITEMS TO BE CHECKED | HOW TO SOLVE |
|---|---|---|
| White copy | • Check the Scan-Cover open. | • Room light can transit a thin original. |
| | • Check shading profile. | • Remake shading profile in the tech mode. |
| Black copy | • Check the CCD problem in Main PBA. | • Check the CCD harness contact. |
| | • Check shading profile. | • Remake shading profile in the tech mode. |
| Defective image quality | • Check shading profile.<br>• Check the gap between original and scanner. | • Remake shading profile in the tech mode.<br>• The gap above 0.5mm can cause a blurred image. |
| | • Check printing quality. | • See “Print” troubleshooting. |
| Abnormal noise | • Check the Scanner Motor and any mechanical disturbance. | • Check the right position of the Scanner Motor, and check the any mechanical dis turbance in the CCD carriaging part. |
| | • Check the Motor Driver in Driver PBA. | • If any driver is defective, replace it. |

## PC-Scan

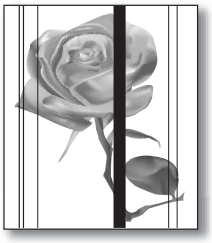
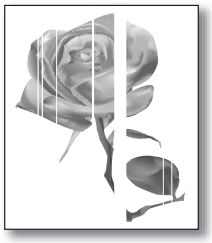
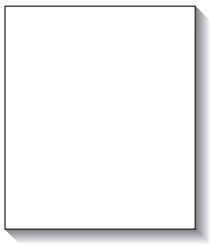
| PROBLEM | ITEMS TO BE CHECKED | HOW TO SOLVE |
|---|---|---|
| Scanning Error | • Check the printer cable installed. | • Check correct installation, and use standard USB cable. |
| | • Check how TWAIN driver is installed. | • Remove any other scanner driver.<br>• Reboot after reinstallation of the TWAIN driver. |
| | • Check the USB signal level. | • If USB signal level is defective, replace Main PBA. |
| Defective image Quality | • Check shading profile.<br>• Check the gap between original and scanner glass. | • Remake shading profile in the tech mode.<br>• The gap above 0.5mm can cause a blurred image. |
| | • Check printing quality. | • See “Print” troubleshooting. |
| Abnormal noise | • Check the Scanner Motor and any mechanical disturbance. | • Check the right position of the Scanner Motor, and check the any mechanical dis turbance in the CCD carriaging part. |
| | • Check the Motor Driver in Driver PBA. | • If any driver is defective, replace it. |

## 4.2.2.2 FAX

### FAX/TELEPHONE Precautions

| PROBLEM | ITEMS TO BE CHECKED | HOW TO SOLVE |
|---|---|---|
| TEL LINE CANNOT BE ENGAGED (NO DIAL TONE) | • When you press " OHD" key:<br>a) Check line cord connection.<br>b) Check MAIN LIU harness, and CN2 of the LIU PBA. | a) insert it correctly into the connection jack called "line".<br>b) Replace defective parts. |
| Cannot MF dial | • Check MAIN-LIU harness. | • Replace defective parts. |
| MF dial is possible but not DP dial. | • Check the LIU PBA. | • Replace LIU PBA. |
| Defective fax transmission | • Check MAIN LIU harness.<br>• Check 'hook off' : Refer to 'TEL LINE CANNOT BE ENGAGED' above.<br>• Check transmission path and reception path of the LIU PBA. | • Replace defective parts.<br>• Refer to 'TEL LINE CANNOT BE ENGAGED' above.<br>• Replace main PBA, if abnormal.<br>• Replace LIU PBA.<br>Replace main PBA. |
| Defective automatic fax reception | • Is the ring checked?<br>• Refer to 'Defective Transmission.' | • Replace LIU PBA if it cannot be checked.<br>• Refer to 'Defective Transmission'. |

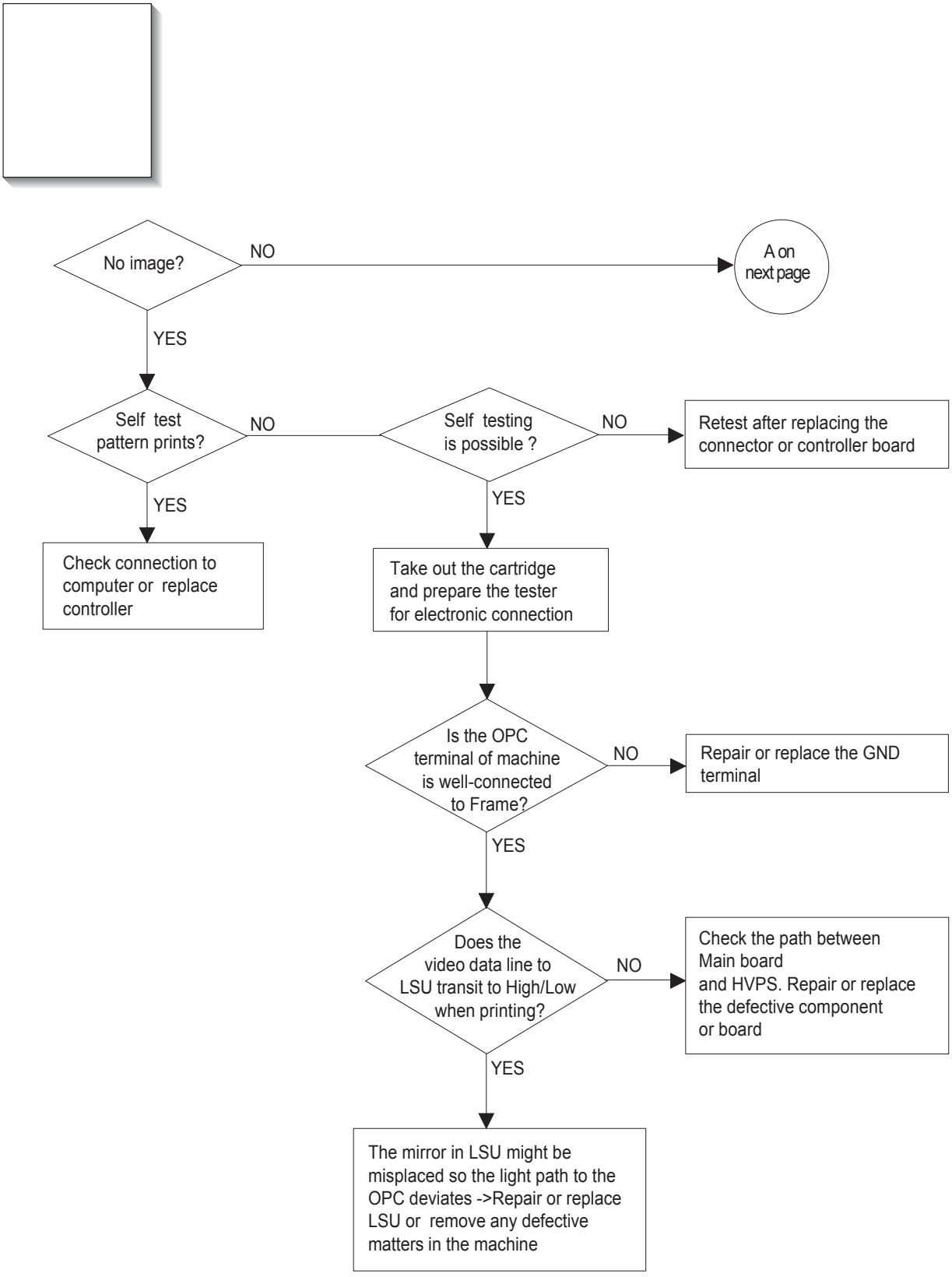
## 4.2.2.3 Print Quality

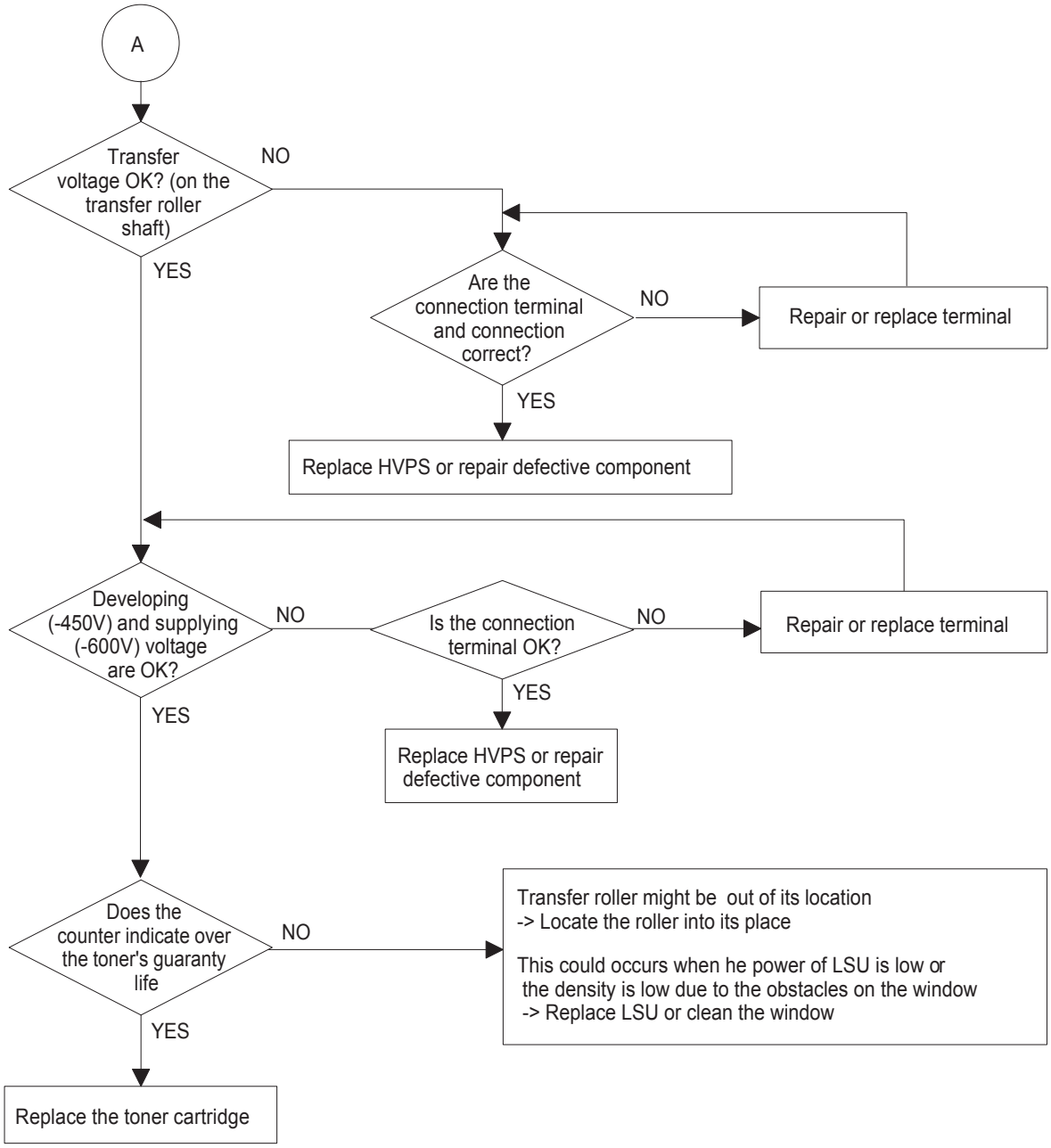
| Error Status | Check | Solution |
|---|---|---|
| **Vertical black line and band**  | 1. Bad blade of Toner cartridge<br>2. LSU<br>3. Bad cleaning blade of drum cartridge. | 1. Change Toner cartridge<br>2. Replace LSU<br>3. Replace drum cartridge. |
| **Vertical white line**  | 1. LSU window contamination<br>2. Toner cartridge | 1. Clean LSU window<br>2. If not LSU, change Toner cartridge. |
| **No image**  | 1. GND OPC is well grounded?<br>2. LSU running well?<br>3. Bias voltage is normal?<br>4. Lower toner?<br>5. Is there video data from Main PBA | 1. Measure the resistance between frame ground and the ground spring attached frame.<br>Confirm stable ground. Unless bad ground, detach cabinet, check where is bad point<br>2. Adjust LSU or replace it<br>3. Normal Dev bias = -450V<br>4. Shake toner cartridge and print.If a like good, toner is empty<br>5. Test engine test pattern , replace Main PBA |
| **Light image** | 1. LSU light power normal?<br>2. Enough toner?<br>3. High charger voltage?<br>4. Lower bias voltage<br>5. Contamination of high voltage contact.<br>6. Transfer volatge and roller. | 1. LSU light power check is difficult. Compare with new one and check.<br>2. Check toner and the toner cartridge counter 3~4. Measure all high voltage output.<br>5. Leakage toner cause bad contact and increase contact resistance. Clean contaminated area. |

| Error Status | Check | Solution |
|---|---|---|
| **Dark image** | 1. LSU light power normal?<br>2. Bias voltage output is high?<br>3. Video data is always supplied?<br>4. Bad high charge voltage contact. | 1. Check the rated level and replace.<br>2. Set to power rating.<br>3. Replace defected board.<br>4. Check the charge voltage or change the drum cartridge. |
| **Background** | 1. High voltage output is normal?<br>2. C/R of drum cartridge is contaminated? | 1. Adjust to the rated status.<br>2. Replace drum cartridge. |
| **Ghost** | 1. High voltage output.<br>2. Pre-Transfer Lamp.<br>3. Bad high voltage contact. | 1. Check every high voltage.<br>2. Check the turn-on PTL, LED crash.<br>3. Clean the inside machine or replace drum cartridge. |
| **Stains on back of paper** | 1. Contamination of transfer roller.<br>2. Stains of paper path.<br>3. Pressure roller's contamination. | 1. Clean the transfer roller with vacuum cleaner.<br>2. Clean the area of paper path with cloth or air cleaner.<br>3. Remove fuser and replace it. |
| **Poor Fusing** | 1. Use recommended paper?<br>2. Check fusing temperature.<br>3. The machine was under the low tempera ture for a long time? | 1. Should use recommended paper.<br>2. Check engine controller board. If you have not thermometer, measure the thermistor voltage to CPU, If 2.3V±5% in printing CPU works well. Then, disassemble fuser and check the thermistor contact and thermistor.<br>3. Re-check after putting the machine in the warm place for certain period. |
| **Partial blank image (not periodic)** | 1. Toner is low?<br>2. The toner cartridge is out of position? | 1. Replace Toner cartridge.<br>2. Checkand adjust. |

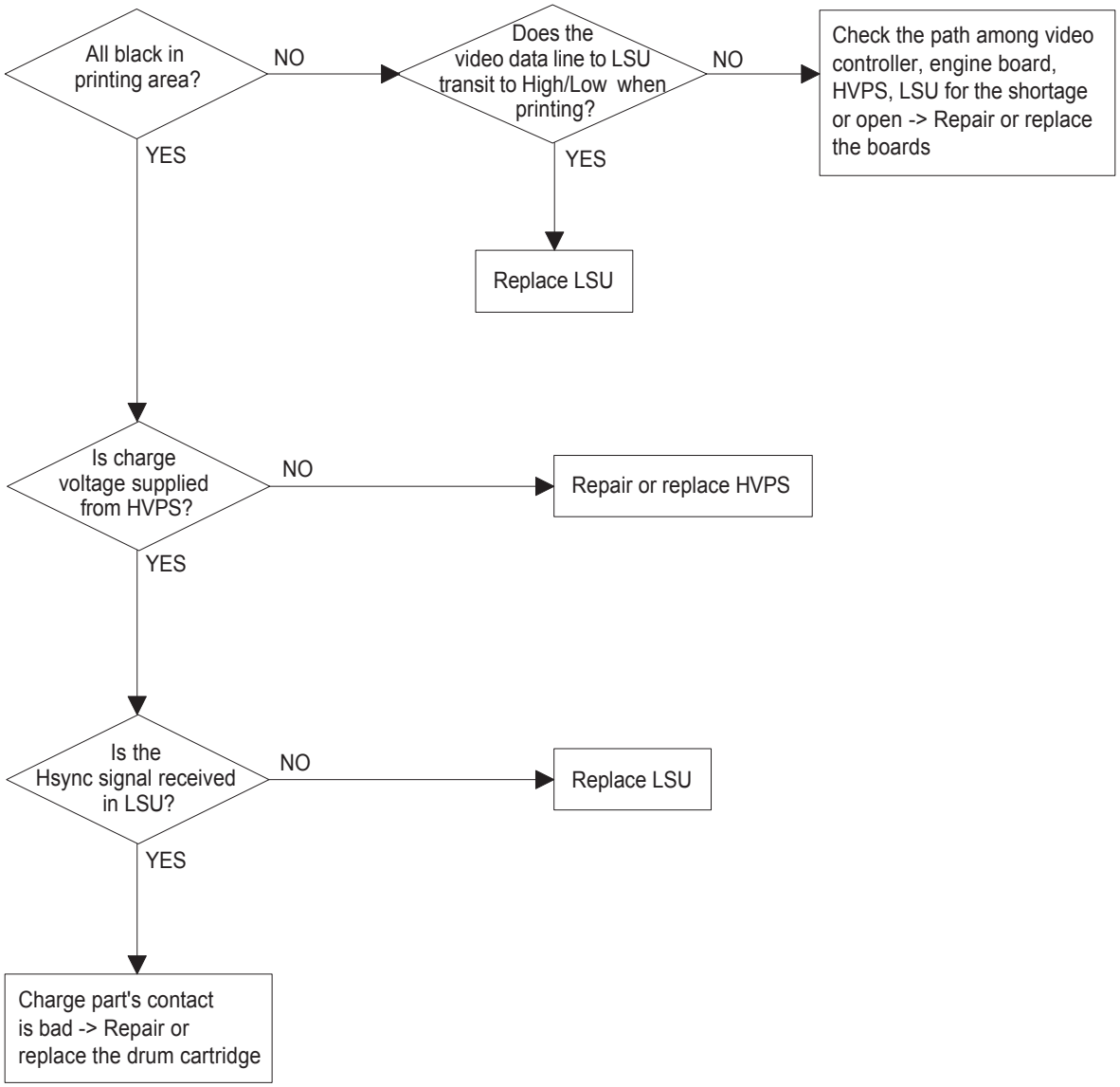
| Error Status | Check | Solution |
|---|---|---|
| **Partial blank image (periodic)** | 1. Develop roller scar or particle.<br>2. Scar or particle. (94.3 mm)<br>3. Transfer roller scar or particle. (56.6 mm) | 1. Replace toner cartridge.<br>2. Replace drum cartridge.<br>3. Replace transfer roller. |
| **Different image density (left and right)** | 1. Charge roller's pressure force unbalance<br>2. Dev. roller and OPC or Dev. roller and blade's pressure force unbalance<br>3. Transfer roller's pressure force unbalance of each side | 1. Replace drum cartridge.<br>2. Replace toner cartridge and drum cartridge.<br>3. Check left and right spring of transfer roller and the spring pressing the toner cartridge inside the machine |
| **Horizonral band** | 1. Unstable high voltage contact<br>2. Charge roller's contamination<br>3. Contamination of heat roller<br>4. Malfunction of LSU | 1. Clean each contact and check good contact<br>2. Clean charge roller<br>3. Replace fuser unit<br>4. Check Main PBA. |

## No Image

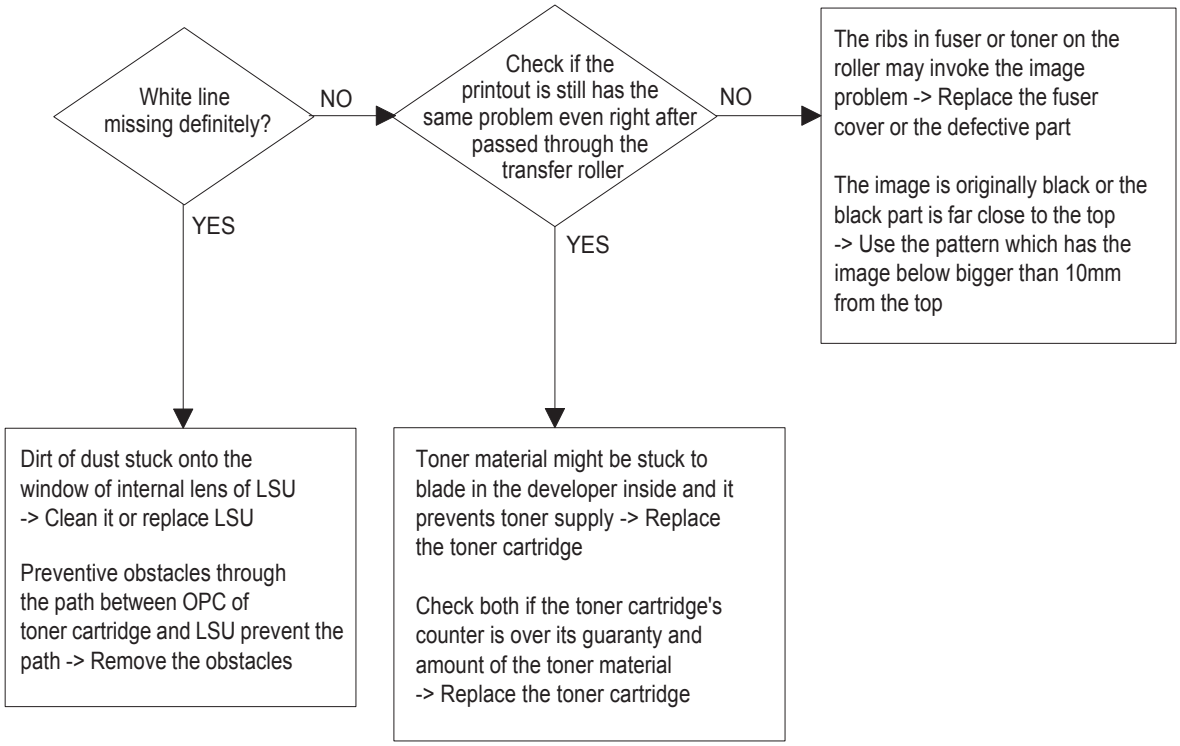

No image?
NO
A on next page
YES
Self test pattern prints?
NO
Self testing is possible ?
NO
Retest after replacing the connector or controller board
YES
YES
Check connection to computer or replace controller
Take out the cartridge and prepare the tester for electronic connection
Is the OPC terminal of machine is well-connected to Frame?
NO
Repair or replace the GND terminal
YES
Does the video data line to LSU transit to High/Low when printing?
NO
Check the path between Main board and HVPS. Repair or replace the defective component or board
YES
The mirror in LSU might be misplaced so the light path to the OPC deviates ->Repair or replace LSU or remove any defective matters in the machine


A
Transfer voltage OK? (on the transfer roller shaft)
NO
YES
Are the connection terminal and connection correct?
NO
Repair or replace terminal
YES
Replace HVPS or repair defective component
Developing (-450V) and supplying (-600V) voltage are OK?
NO
Is the connection terminal OK?
NO
Repair or replace terminal
YES
Replace HVPS or repair defective component
YES
Does the counter indicate over the toner's guaranty life
NO
Transfer roller might be out of its location
-> Locate the roller into its place
This could occurs when he power of LSU is low or the density is low due to the obstacles on the window
-> Replace LSU or clean the window
YES
Replace the toner cartridge

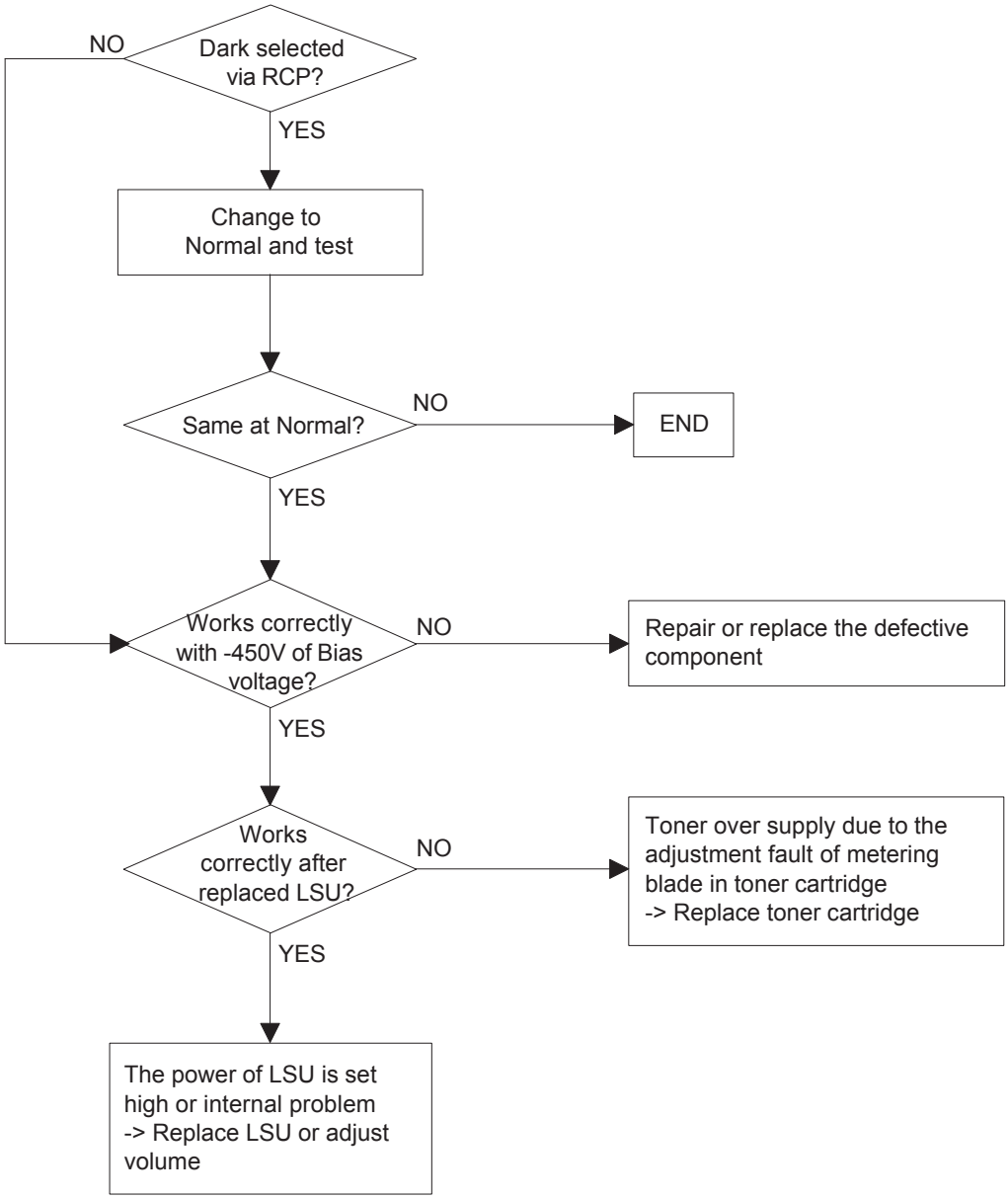
## All Black


All black in printing area?
NO
Does the video data line to LSU transit to High/Low when printing?
NO
Check the path among video controller, engine board, HVPS, LSU for the shortage or open -> Repair or replace the boards
YES
YES
Replace LSU
Is charge voltage supplied from HVPS?
NO
Repair or replace HVPS
YES
Is the Hsync signal received in LSU?
NO
Replace LSU
YES
Charge part's contact is bad -> Repair or replace the drum cartridge

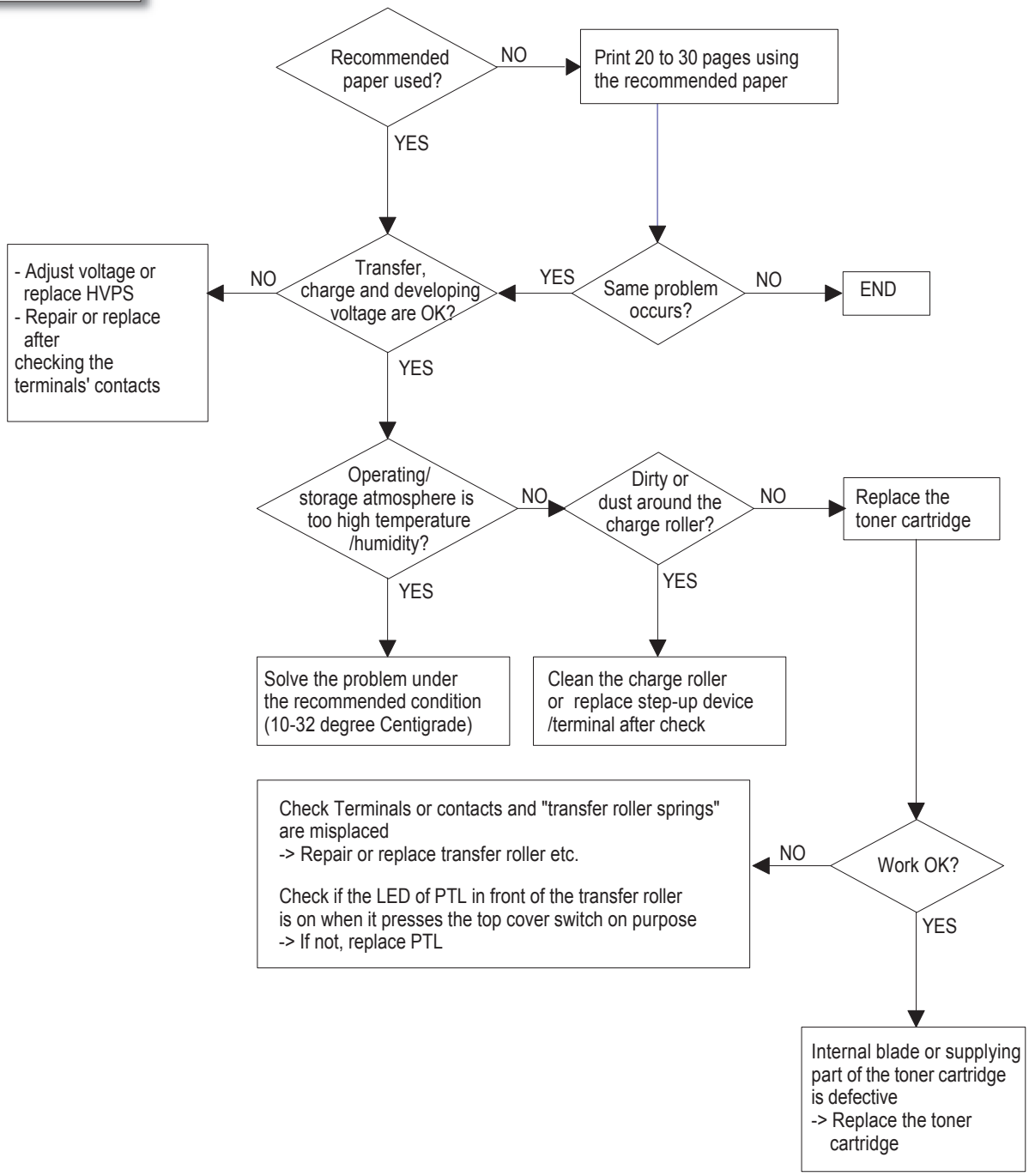
## Vertical White Line (Band)



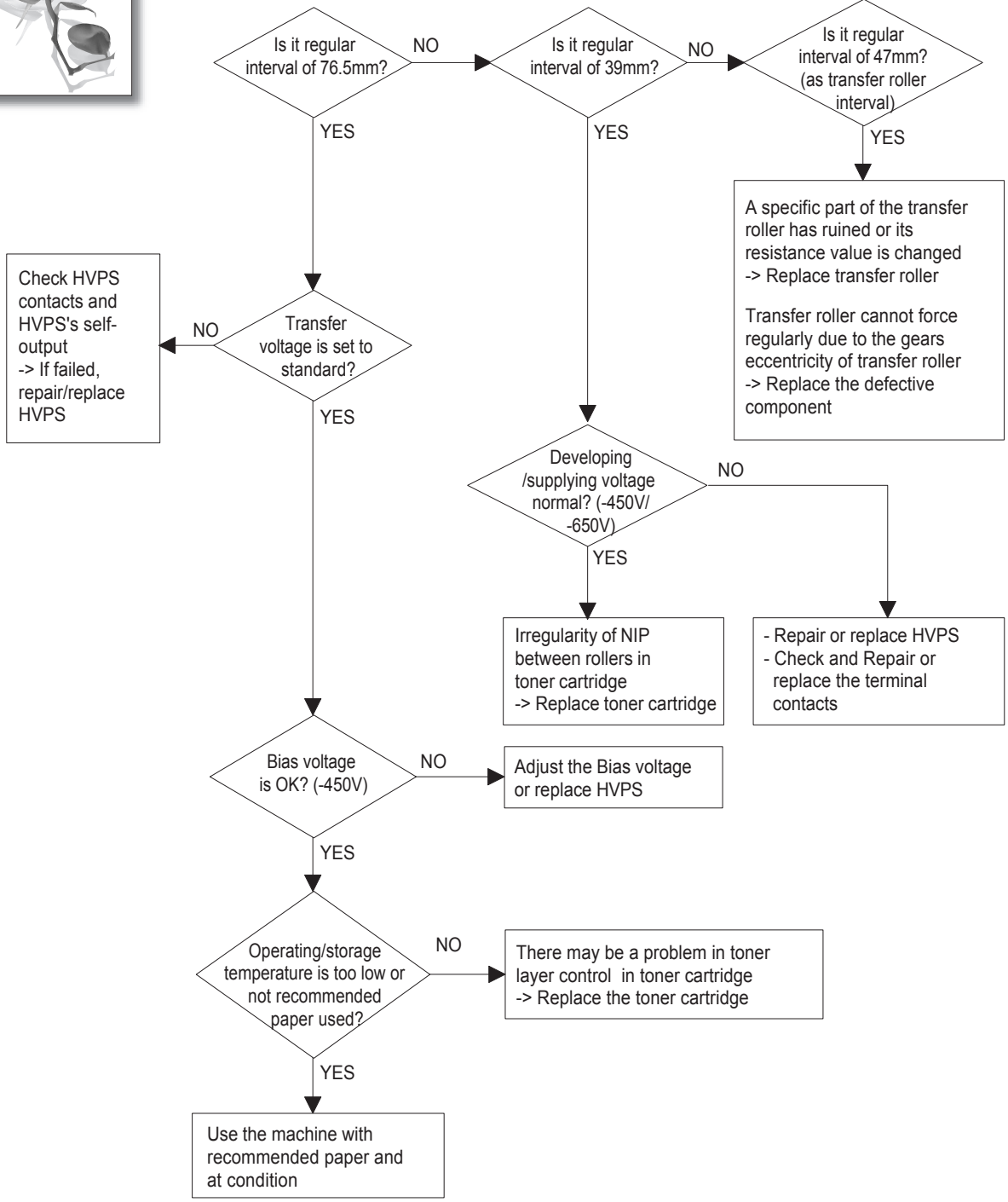
## Dark Image


Dark selected via RCP?
NO
YES
Change to Normal and test
Same at Normal?
NO
END
YES
Works correctly with -450V of Bias voltage?
NO
Repair or replace the defective component
YES
Works correctly after replaced LSU?
NO
Toner over supply due to the adjustment fault of metering blade in toner cartridge
-> Replace toner cartridge
YES
The power of LSU is set high or internal problem
-> Replace LSU or adjust volume

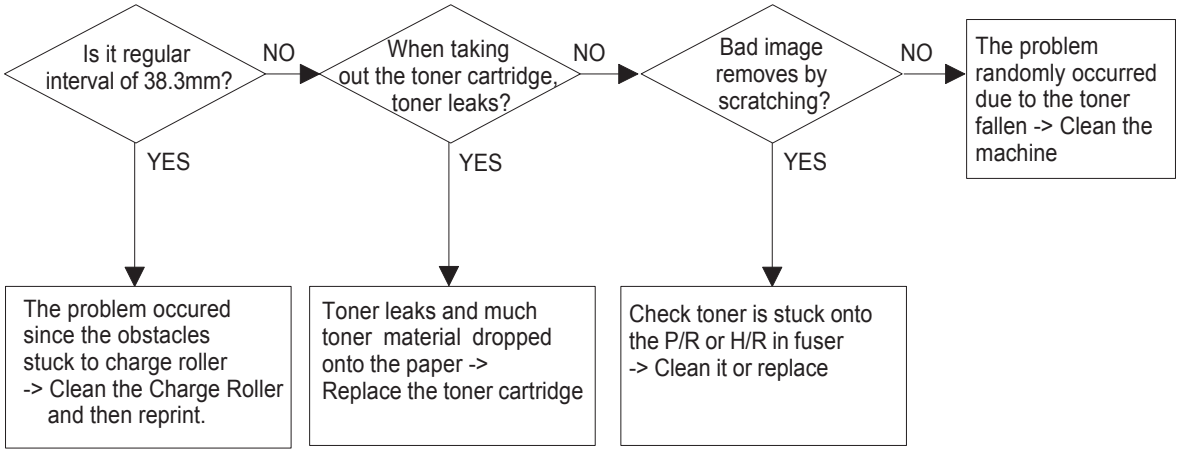
## Barkground


Recommended paper used?
NO
Print 20 to 30 pages using the recommended paper
YES
Same problem occurs?
NO
END
YES
Transfer, charge and developing voltage are OK?
NO
- Adjust voltage or replace HVPS
- Repair or replace after checking the terminals' contacts
YES
Operating/ storage atmosphere is too high temperature /humidity?
NO
Dirty or dust around the charge roller?
NO
Replace the toner cartridge
YES
YES
Solve the problem under the recommended condition (10-32 degree Centigrade)
Clean the charge roller or replace step-up device /terminal after check
Check Terminals or contacts and "transfer roller springs" are misplaced
-> Repair or replace transfer roller etc.
Check if the LED of PTL in front of the transfer roller is on when it presses the top cover switch on purpose
-> If not, replace PTL
NO
Work OK?
YES
Internal blade or supplying part of the toner cartridge is defective
-> Replace the toner cartridge

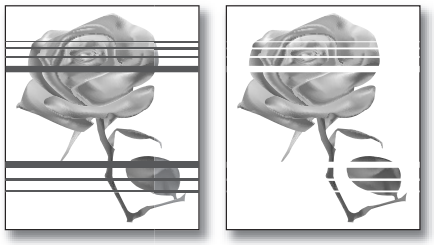
## Ghost

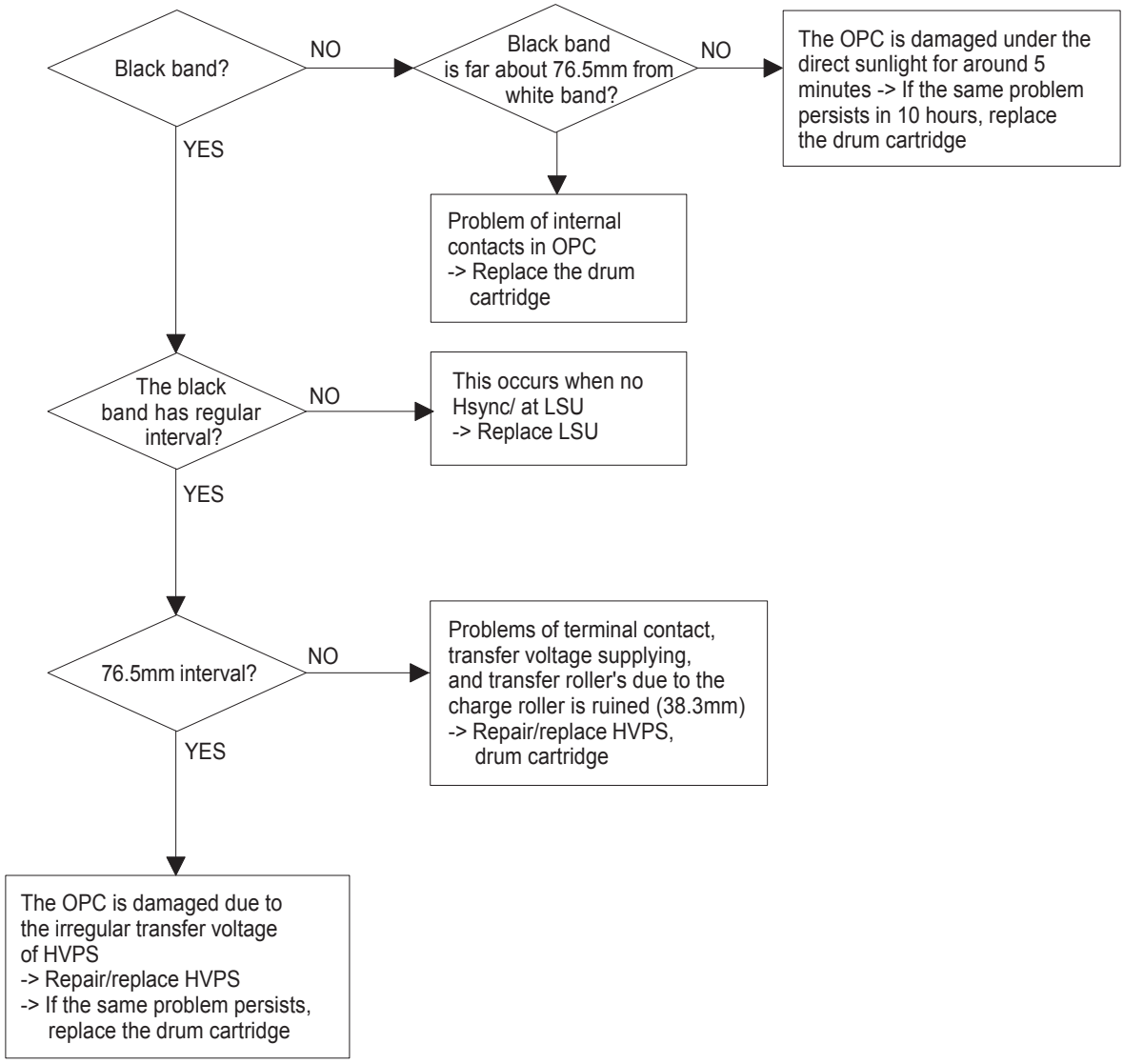

Is it regular interval of 76.5mm?
NO
Is it regular interval of 39mm?
NO
Is it regular interval of 47mm? (as transfer roller interval)
YES
YES
YES
A specific part of the transfer roller has ruined or its resistance value is changed
-> Replace transfer roller
Transfer roller cannot force regularly due to the gears eccentricity of transfer roller
-> Replace the defective component
Check HVPS contacts and HVPS's self-output
-> If failed, repair/replace HVPS
NO
Transfer voltage is set to standard?
YES
Developing /supplying voltage normal? (-450V/ -650V)
NO
YES
Irregularity of NIP between rollers in toner cartridge
-> Replace toner cartridge
- Repair or replace HVPS
- Check and Repair or replace the terminal contacts
Bias voltage is OK? (-450V)
NO
Adjust the Bias voltage or replace HVPS
YES
Operating/storage temperature is too low or not recommended paper used?
NO
There may be a problem in toner layer control in toner cartridge
-> Replace the toner cartridge
YES
Use the machine with recommended paper and at condition

## Black Spot

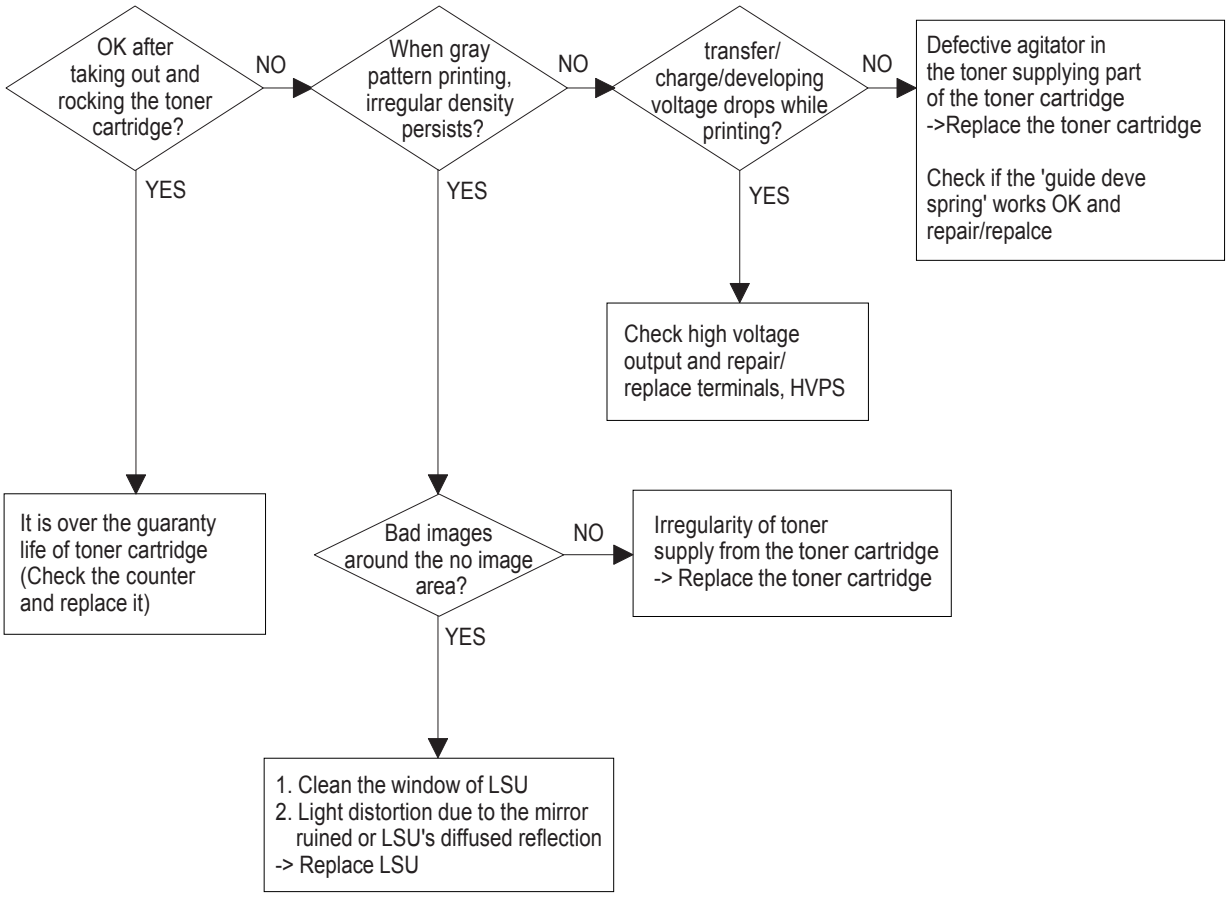

Is it regular interval of 38.3mm?
NO
When taking out the toner cartridge, toner leaks?
NO
Bad image removes by scratching?
NO
The problem randomly occurred due to the toner fallen -> Clean the machine
YES
YES
YES
The problem occured since the obstacles stuck to charge roller -> Clean the Charge Roller and then reprint.
Toner leaks and much toner material dropped onto the paper -> Replace the toner cartridge
Check toner is stuck onto the P/R or H/R in fuser -> Clean it or replace

## Horzontal Band

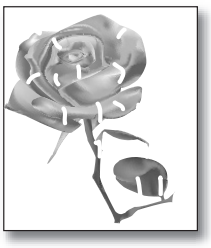


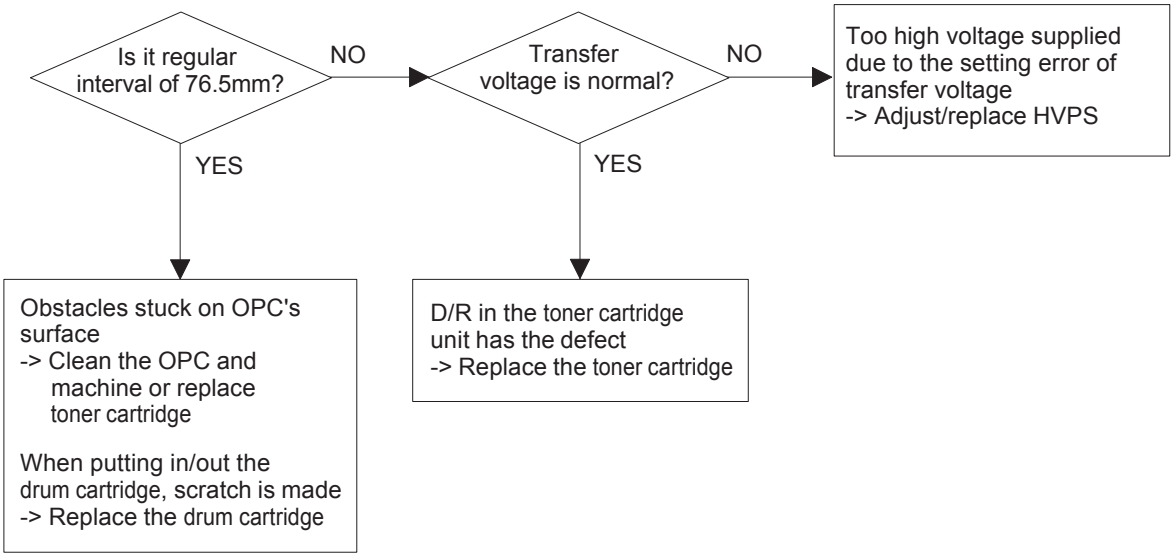


## Irregular Density

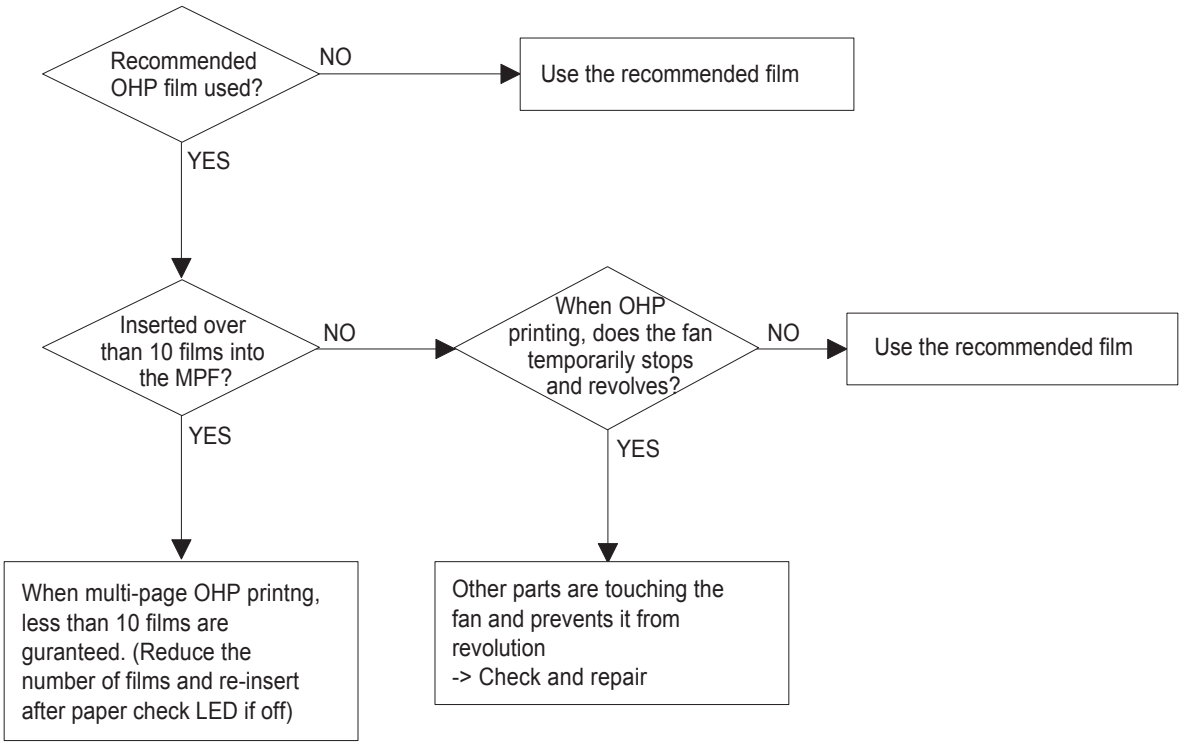


## White Spot

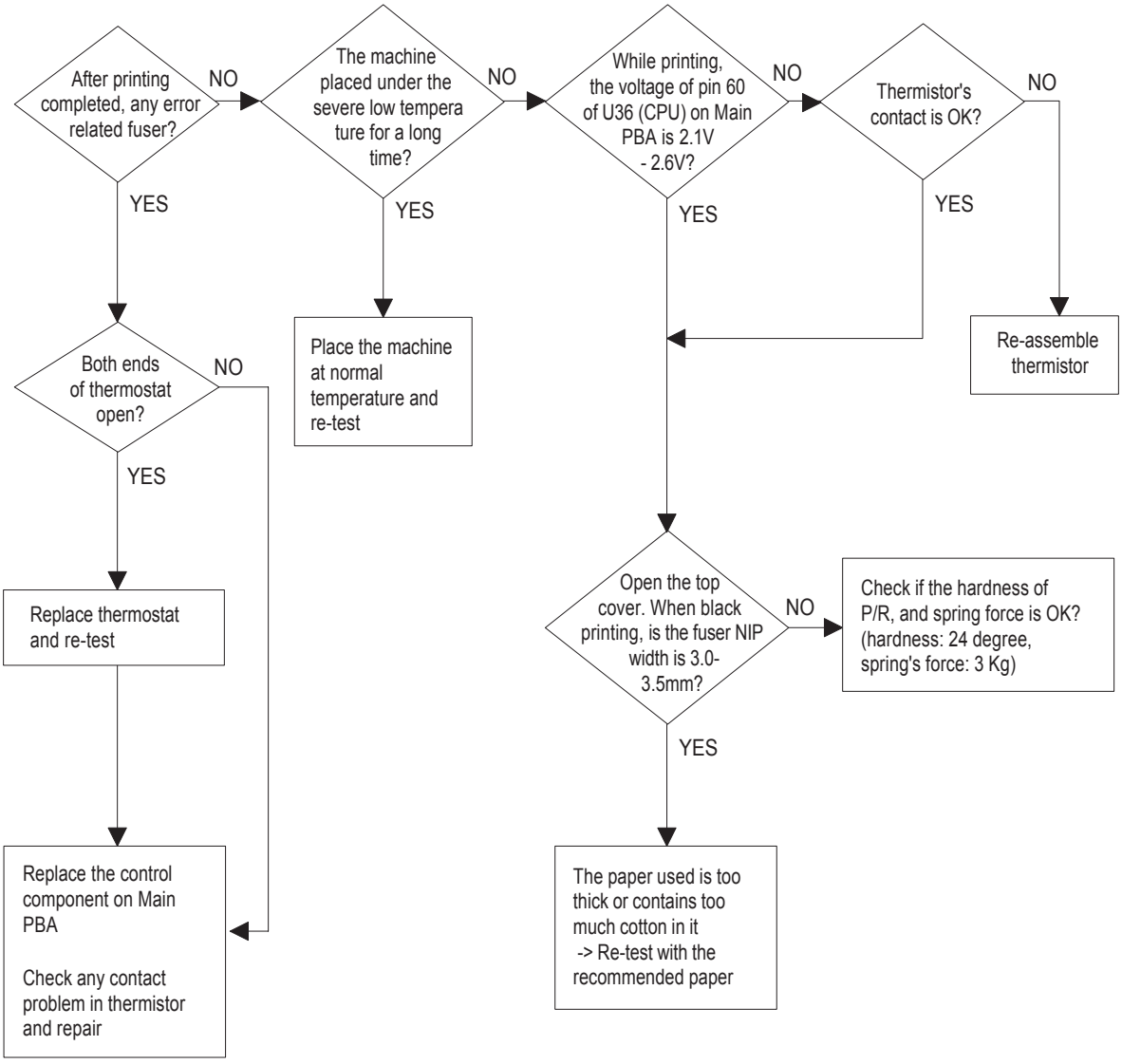



Is it regular interval of 76.5mm?
NO
Transfer voltage is normal?
NO
Too high voltage supplied due to the setting error of transfer voltage
-> Adjust/replace HVPS
YES
YES
Obstacles stuck on OPC's surface
-> Clean the OPC and machine or replace toner cartridge
When putting in/out the drum cartridge, scratch is made
-> Replace the drum cartridge
D/R in the toner cartridge unit has the defect
-> Replace the toner cartridge

## Trembling at the End When OHP Printing



## Poor Fusing Grade

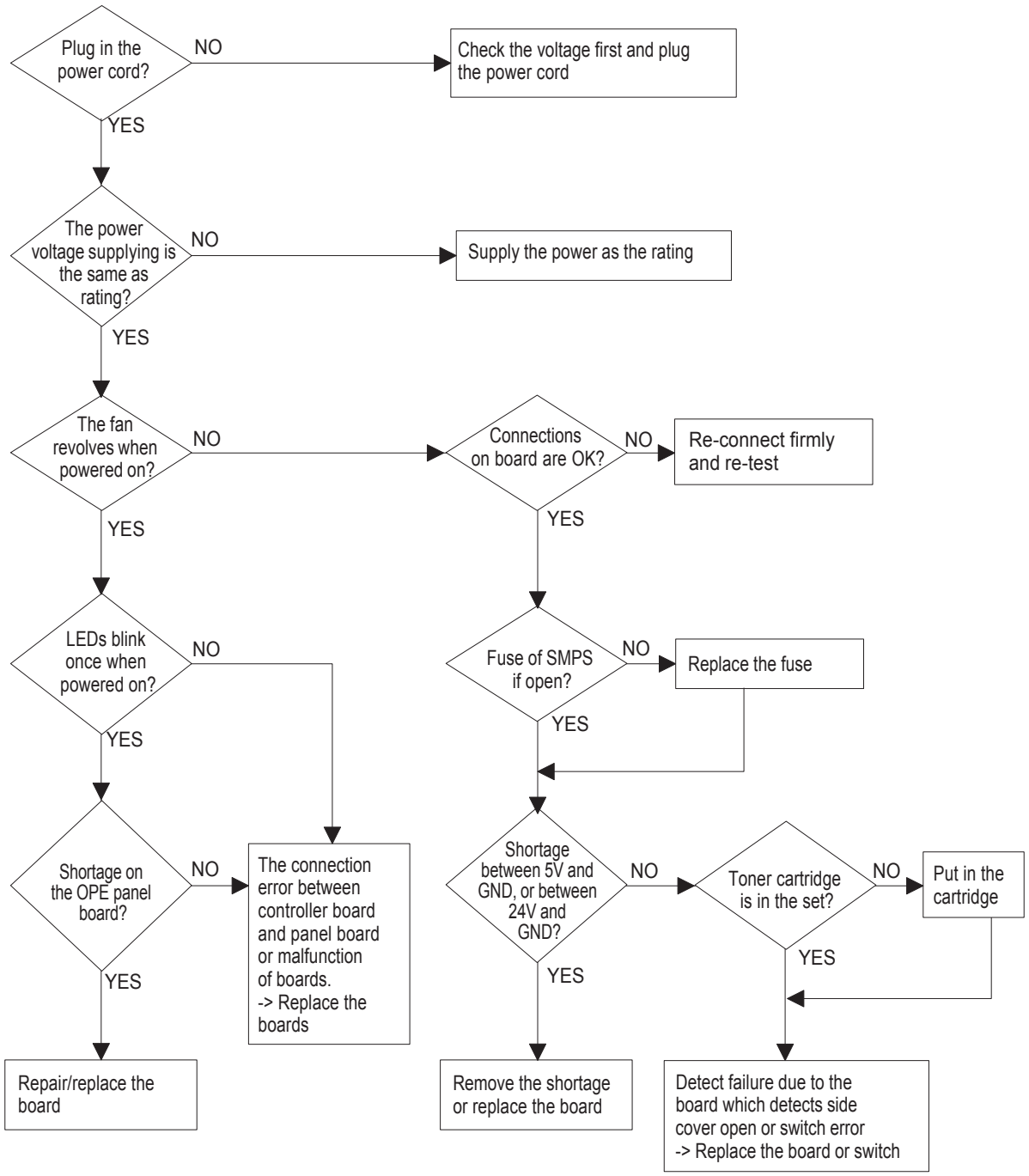


### 4.2.2.4 Malfunction

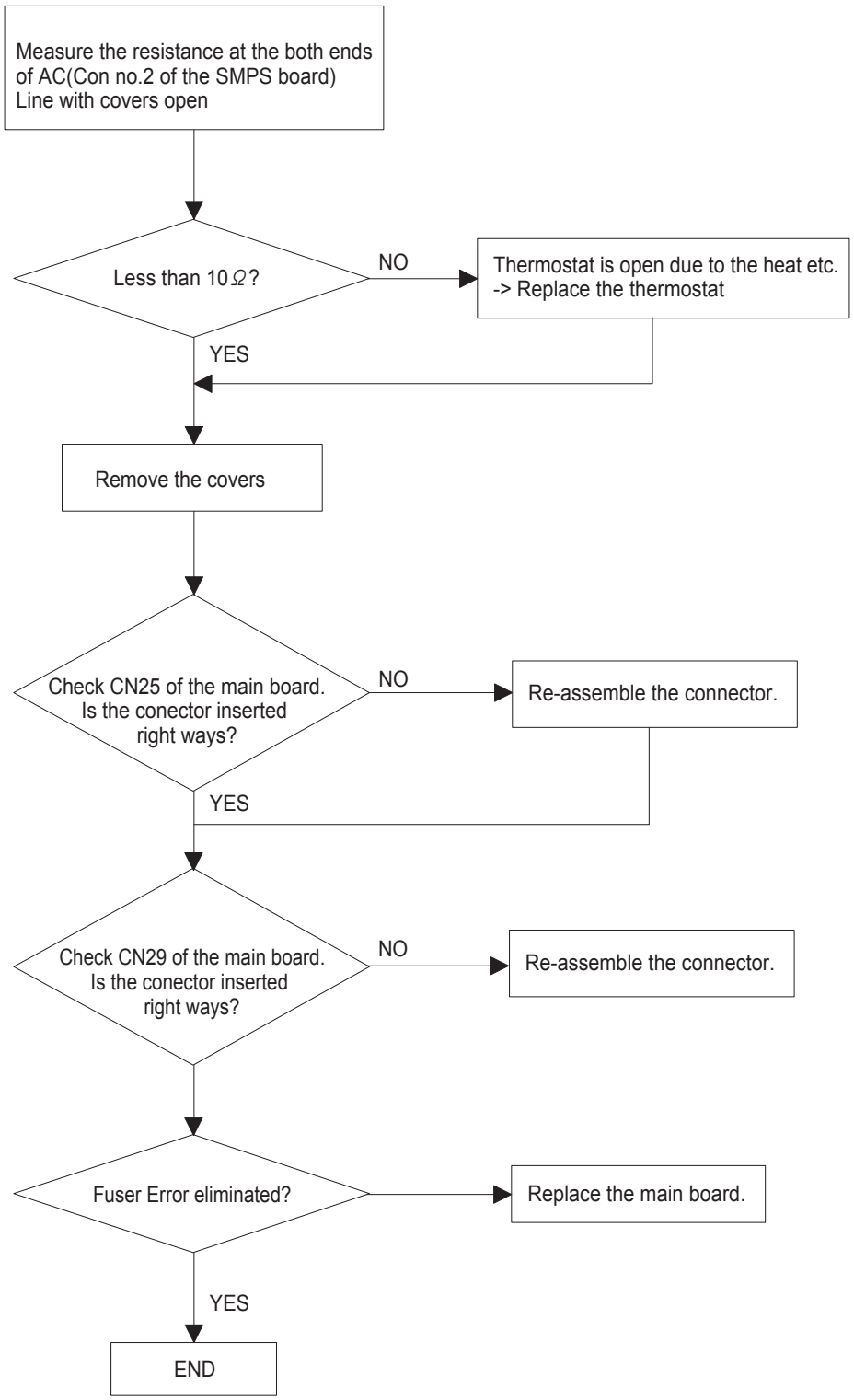
| Error Status | Check | Solution |
|---|---|---|
| No power | 1. Check power is supplying<br>2. Check fuse F1 open | 1. If supplying power differs from machine's power rating, replace the machine.<br>2. Replace it. |
| Fuser Error | 1. Thermostat open<br>2. AC wire open<br>3. Thermistor wire open<br>4. Main PBA | 1. Detach AC connector and measure the resistane between pin 1 and 2. If it is megohm, thermostat is open, Replace it.<br>2. Check bad connector contact or wire is cut.<br>3. Check thermistor wire and its connection.<br>4. Replace Main PBA |
| Cover open | 1. When close Side cover, check the lever is pressed<br>2. Micro switch's contact<br>3. CPU and related circuit | 1. Open Side cover and press the lever with pen. If Controller detects cover close, there is some mechanical trouble in Side cover and lever's assembly. If not so there is electrical problem. |
| Jam 0 | Check where Jam 0 happens<br>1. Paper is not picked up<br>2. Paper is located in feed sensor<br>3. Happened when inserting specific papers such as envelope into the MPF (Multipurpose Paper Feeder)?<br>4. Happened when inserting specific papers such as envelope into the Manual Feeder?<br>5. Is the Stacker Extender is folded out?<br>6. Does not the Guide Adjust distort the papers | 1. Check whether solenoid is working or not by using Engine test mode<br>2. Check feed sensor malfunction.<br>3. Re-try inserting a fewer papers.<br>• fan the papers and align<br>• take out the loaded papers and insert them reverse direction<br>4. Take out the loaded papers and insert them reverse direction<br>• inserted papers as recommended for Manual Feeding?<br>• When loading, tap the papers until paper detect sensor senses loading<br>5. When using long papers, use the Stacker Extender<br>6. Adjust Guide to fit the paper width |
| Jam 1 | Paper is stopped in just after of fuser unit. | 1. It is mostly resulted from double feeding. Check paper is well stocked in feeder.<br>2. Check feed actuator position and actuator's operating. There may be stiff movind or double reflection. If not so, check the operation of feed sensor by Engine test mode.<br>3. Check exit lever operation. Remore jam and check actuator moving by hand. If actuator is too stiff, paper is wrapped around the heat roller. Remove obstacles or replace. |

| Error Status | Check | Solution |
|---|---|---|
| Jam 2 | Check where Jam 2 happens<br>1. Paper is curled and cannot exit.<br>2. Paper is curled in the exit cover? | 1. Remove paper using pinset or some tool and watch if separate claws have any troble. Clean around fuser.<br>2. Check locking works wells. Watch whether the ribs of exit cover hace any burr or resisitive edge. If they do, remove obstacles or replace. |
| Jam 2 at face-down tray | 1. Then paper is not drawn in because of the stack of papers in the Out tray.<br>2. Does it curl while coming out? | 1. Load recommended quantity of papers<br>2. Open the Cover Front and check whether roller or spring, which are related to paper out, is not out of position. If so, re-locate or replace. |
| Clutch error | 1. Check the spring of solenoid<br>2. Check the armature assembly/ cushion<br>3. Electrical check | 1. Check whether the spring is expanded or not.<br>2. Check armature is well installed. It may be unstable assemble.<br>3. Remove the Main PBA. |
| High voltage error | 1. Check the terminal output voltage<br>2. Check HVPS | 1. Remove the Toner cartridge and open the cover and press cover open switch lever and measure the voltage with high voltage probe and sending printing data. If the voltage is normal, change the toner cartridge.<br>2. Disassemble the left side cover, and check HV of the solder side of HVPS and change it. |
| Feeding obstacles | Does the Plate-knockup prevent the paper loading? | MPF :<br>Turn the power off and on. Open and close the Side cover to return to the original state.<br>Cassette :<br>Adjust Guide to fit the paper width. |
| Skew | Is the Guide adjust set to the paper width? | Fit the paper width using the Guide adjust. |
| Stacking | 1. Took out the Stacker extender to support long papers?<br>2. Stacked too many papers more than Stacker can hold? | 1. Use extender as per the paper length.<br>2. The Face-up stacker normally can hold 100 pages when using 75g/m2, however, stacking capacity can be lowered depending on the type of papers. |
| Engine Error | Check CBF Harness_CN7.(Main PBA to LSU) | Refer to troubleshooring “ENGINE ERROR”. |
| Document Jam | Document is not picked up(in ADF). | 1. Check document is well stocked in ADF.<br>2. Check whether document was been fastened together by staple or clip.<br>3. Load recommended quantity of papers. |
| | Document is stopped after it has fed into the ADF. | 1. Check whether the Reg. sensor is working or not.<br>2. Check whether the Feed Roller is working or not. |
| | Does it curl while coming out? | 1. Check the Open Cover whether there are bosses.<br>2. Check the ADF ass’y is well assemble. |

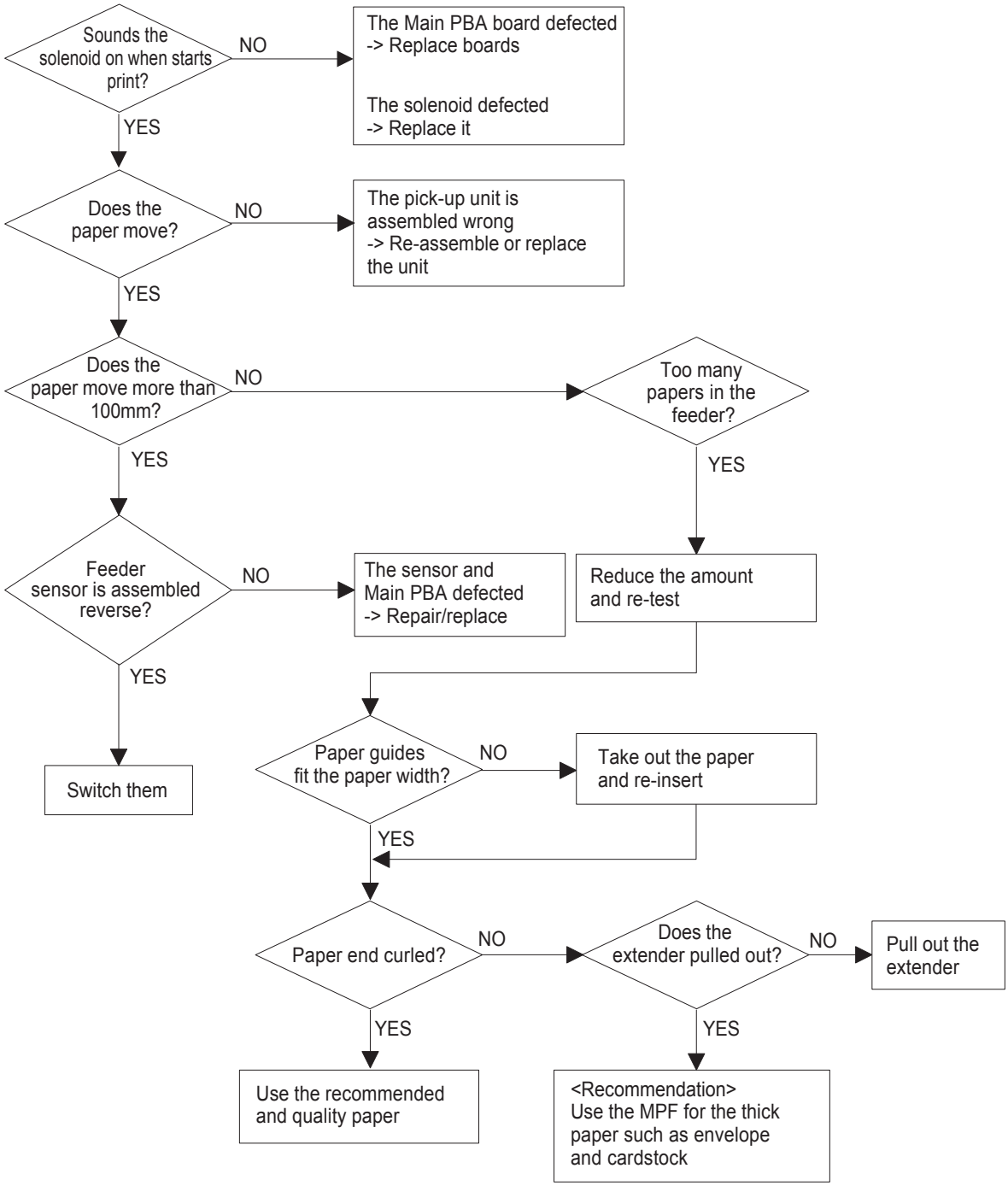
## No Power (LCD NO display LED Off)



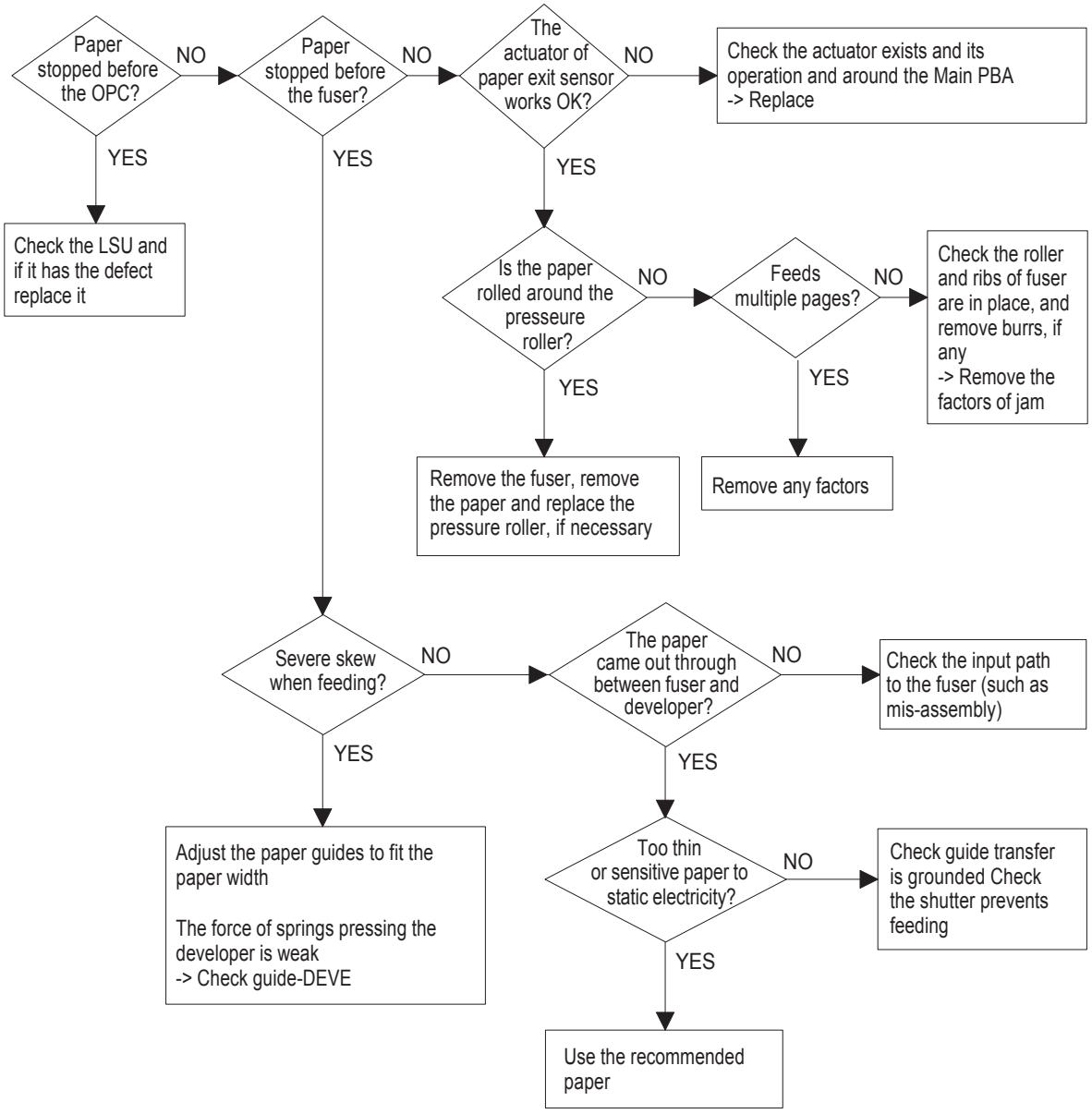
## Fuser Error


Measure the resistance at the both ends of AC(Con no.2 of the SMPS board) Line with covers open
Less than 10Ω?
NO
Thermostat is open due to the heat etc. -> Replace the thermostat
YES
Remove the covers
Check CN25 of the main board. Is the conector inserted right ways?
NO
Re-assemble the connector.
YES
Check CN29 of the main board. Is the conector inserted right ways?
NO
Re-assemble the connector.
Fuser Error eliminated?
Replace the main board.
YES
END

## Paper Jam (Mis-Feeding)



## Paper Jam (Jam 1)



## 4.2.2.5 The cause and solutions of bad environment of the software

***NOTE -*** *Always try to an internal page and a copy to be sure that the machines is working and the problem is related to SW.*

### 4.2.2.5(a) The printer is not working (1)

**Description : While Power turned on, the printer is not working in the printing mode.**

| Check and Cause | Solution |
|---|---|
| 1. Check if the PC and the printer is properly connected and the toner cartridge installed.<br>2. Printing is nor working in the Windows.<br>3. Check if the printer cable is directly connected to peripheral devices | 1. Replace the printer cable. If the problems not solved even after the cable replaced, check the amount of the remaining tone.<br>2. Check if the connection between PC and printer port is proper. If you use windows, check if the printer driver in the controller is set up. If the printer driver is properly set up, check in which program the printing is not working. The best way to find out is to open the memo pad to check the function of printing. If it is not working in a certain program, adjust the setup the program requires.<br>Sometimes, the printout is normal within the Windows basic programs, but it's not working in a particular program. In such case, install the new driver again. If not working in the Windows basic program, Check the setup of the port of CMOS is on ECP. And check the address of IRQ 7 and 378<br>3. If the scanner needs to be connected to the printer, first the remove the scanner from the PC to see if the printer is properly working alone. |

### 4.2.2.5(b) The printer is not working (2)

**Description : After receiving the printing order, no response at all or the low speed of printing occurs due to wrong setup of the environment rather than malfunction of the printer itself.**

| Check and Cause | Solution |
|---|---|
| 1. Secure more space of the hard disk.<br>2. Printing error occurs even if there is enough space in the hard disk.<br>3. Check the parallel-port-related items in the CMOS Setup.<br>4. Reboot the system to print. | 1. Not working with the message 'insufficient printer memory' means hard disk space problem rather than the RAM problem. In this case, provide more space for the hard disk. Secure more space using the disk utilities program.<br>2. The connection of the cable and printer port is not proper. Check if the connection is properly done and if the parallel port in CMOS is rightly set up.<br>3. As a printer port, Select ECP or SPP among SPP(Normal), ECP, and EPP modes(increase printing speed) SPP normal mode support 8-bit data transfer, while ECP Mode transfer the 12-bit data.<br>4. If the regular font is not printing, the cable or the printer driver may be defective. Turn the PC and printer off, and reboot the system to print again. If not solved, double-click the printer in my computer If the regular fonts are not printed this time again. the cable must be defective so replace the cable with new one. |

### 4.2.2.5(c) Abnormal Printing

**Description :** **The printing is not working properly even when the cable has no problem. (even after the cable is replaced) If the printer won't work at all or the strange fonts are repeated, the printer driver may be defective or wrong setup in the CMOS Setup.**

| Check and Cause | Solution |
|---|---|
| 1. Set up the parallel port in the CMOS SETUP.<br>2. Printer Driver Error.<br>3. Error message from insufficient memory. (The printing job sometimes stops or due to insufficient virtual memory, but it actually comes from the insufficient space of the hard disk.) | 1. Select SPP(Normal) or ECP LPT Port the among ECP, EPP or SPP in the CMOS Setup.<br>2. Check the printer in My Computer.(to see if the printer driver is compatible to the present driver or delete the old driver, if defective and reinstall the new driver)<br>3. Delete the unnecessary files to secure enough space of the hard disk and start printing job again. |

### 4.2.2.5(d) SPOOL Error

**Description :** **To spool which stands for "simultaneous peripheral operations online" a computer document or task list (or "job") is to read it in and store it, usually on a hard disk or larger storage medium so that it can be printed or otherwise processed at a more convenient time (for example, when a printer is finished printing its current document).**

| Check and Cause | Solution |
|---|---|
| 1. Insufficient space of the hard disk in the directory assigned for the basic spool.<br>2. If the previous printing error not solved.<br>3. When expected to collide with other program.<br>4. When an application program or the printer driver is damaged.<br>5. When some files related to OS are damaged or virus infected.<br>6. Memory is less than suggested one. | 1. Delete the unnecessary files to provide more space to start printing job.<br>2. If there are some files with the extension name of ****.jnl, Delete them and Reboot the Windows to restart printing job.<br>3. Shut down all other programs except the current one, if possible.<br>4. Delete the printer driver completely and reinstall it.<br>5. After rebooting the computer, check for viruses, restore the damaged files and reinstall the program to do the printing job.<br>6. Add up enough memory to the PC. |

**How to delete the data in the spool manager.**

In the spool manager, the installed drivers and the list of the documents waiting to be printed are shown.
Select the document to be deleted and check the delete menu.
If you intend to delete the current document being printed, the data being transferred to the printer will be put out and then the document is removed. Before choosing the document, the menu is still inactive.
Or put the document out of the list and repeat the routine as in the above or finish the spool manager.